



REUNION ISLAND

SAINT ÉTIENNE RIVER BRIDGE

The new bridge over the Saint Étienne River is being built to replace the structure destroyed by a cyclone in 2007. It is designed to withstand the island's flooding and torrential rains and carry daily traffic of nearly 60,000 vehicles. The facings of its eight piers have a sugar cane motif. The Reunion Regional Council awarded the €95 million contract to a consortium made up of VINCI Construction companies. Dodin Campenon Bernard, Botte Fondations and SBTPC pooled their foundation, civil engineering and development capabilities to carry out the project. Special measures have been introduced to conserve biodiversity throughout the works.



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A DYNAMIC BUSINESS 08 MODEL

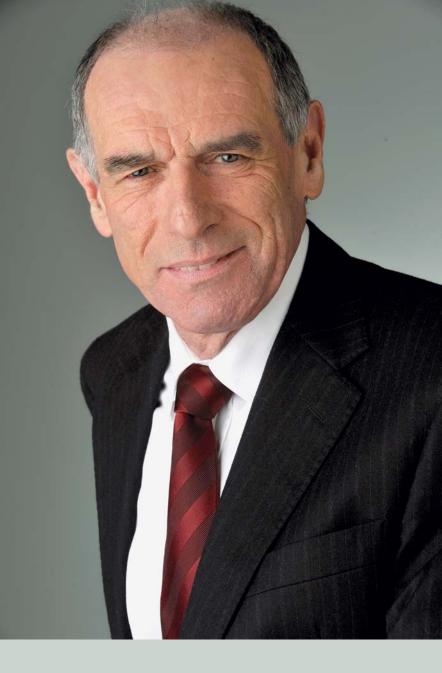
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- Building 34
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- Hydraulic engineering 68

Main VINCI Construction companies 76

02 INTERVIEW WITH THE CHAIRMAN



Jean Rossi Chairman of VINCI Construction

"We are winning more and more contracts on the strength of synergies among our companies."

What is your assessment of 2012?

During the year we demonstrated that our Group is sound and can rise to new challenges. Notwithstanding the economic downturn affecting our markets - especially in France and more broadly in Europe as a whole – our volume continued to grow, with revenue increasing 8.6% in 2012. This growth reflects the quality and effectiveness of our local roots in France and Europe, but also in Africa, where we deliberately concentrated on quality and customer satisfaction and where the majority of our supervisory staff is now African. We also owe our good performance to the international spread of our specialised businesses. They are now operating in more than 100 countries around the world and they stepped up their expansion in 2012, focusing especially on high-growth regions such as Latin America and Canada. We were able to build on the strength of our Group to maintain our overall economic performance despite the ups and downs we experienced on a number of projects. The other standout feature of 2012 was the ability of our VINCI Construction teams to rise to new challenges. This was particularly noticeable in large projects, such as the three major contracts we won in the international market at the end of the year: the Atlantic Bridge in Panama; two tunnels for the Hong Kong metro (marking our return to the major structures segment in Asia); and VINCI's first PPP in the United States, the Ohio River East End Crossing project in Indiana, which has a value of about \$1 billion. Another illustration of our drive to expand and to innovate is of course the concession contract for the South Europe Atlantic (SEA) Tours-Bordeaux high-speed rail line in France. VINCI has mustered the full range of its capabilities and VINCI Construction managed to put together a team of nearly 6,000 people in record time for a project on which all our businesses are spearheading the work.

How is 2013 shaping up?

Our order book currently covers over four-fifths of our forecast activity for the year and gives us a

fairly clear picture of what lies ahead. We expect that volume will remain unchanged or perhaps come in slightly higher than in 2012. The remaining uncertainties are due to the lack of visibility in the French market at the end of the year. We also know that our business activity will vary considerably from one region to another in 2013, with the European economy remaining mired in recession and other regions experiencing strong growth. We have taken a strategic decision to focus our expansion on these growing economies in Africa, South-East Asia and Latin America. Meanwhile, in France, the SEA project will be in full swing, generating an impressive amount of work with a value of some $\in 1.2$ billion. All this taken together strongly suggests that growth will be uneven and that all our teams and all our companies will have challenges to contend with.

What are your longer-term goals for VINCI Construction?

First of all, to leverage the group effect to step up our international expansion, doing so in compliance with our values of selective ordertaking, rigour and risk management. We are demonstrably winning more and more contracts on the strength of the synergies among our companies. In Africa, for example, we owe the orders that have come in for port construction and large bridge and tunnel projects to the combination of our local operations and our specialised civil engineering and foundation subsidiaries. Further opportunities will be opening up in the oil and mining infrastructure segments. We will be pressing ahead with our drive to network our expertise and resources, facilitate employee mobility around the world and boost our ability to deliver complex turnkey design-build projects. VINCI Construction's priorities are clear. By capitalising on our strengths, we will be able to maintain and reinforce our global operations and performance going forward.

04 MANAGEMENT TEAM

Alain Bonnot

Chairman, VINCI Construction Grands Projets

John Stanion Chairman,

VINCI PLC



Chairman and Chief Executive Officer, Entrepose Contracting

Jérôme Stubler

Chief Executive Officer of Soletanche Systems, VINCI Freyssinet

Samir Hatim

Director of Information Construction

Joseph Attias Director of Engineering, VINCI Construction



Philippe Chavent

Chairman, Sogea-Satom

Bernard Lenfant

Chairman, VINCI Construction Dom-Tom

Gérard Bienfait Chairman, VINCI

Construction France

Jean Rossi Chairman, VINCI Construction

Managing Director, CFE, Chairman of the Management Committee of DEME

Director of Health and Safety, VINCI Construction André Hubard Director, Central Europe subsidiaries



Chief Administrative and Financial Officer, VINCI Construction



Hervé Meller

Director of Human Resources, VINCI Construction

Xavier Neuschwander Chairman,

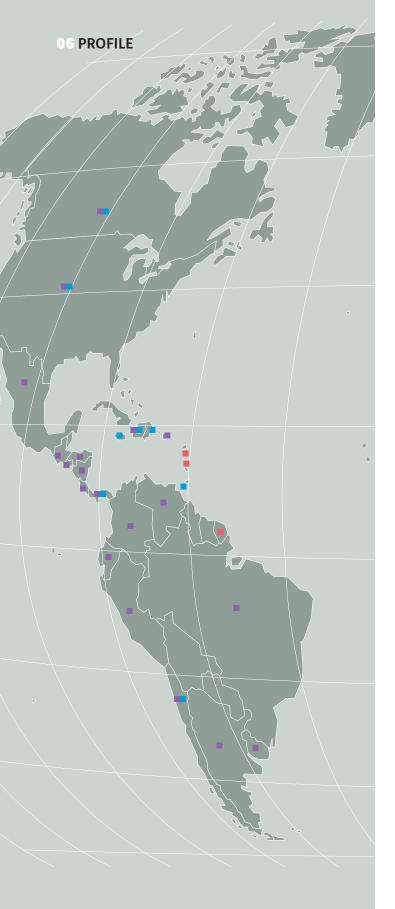
VINCI Construction Terrassement

Bruno Dupety

Chief Operating Officer, VINCI Construction and Chairman, Soletanche Freyssinet

Manuel Saez-Prieto

Director of Communications, VINCI Construction



VINCI Construction is France's leading construction company and a major global player. Its 1,000 companies employ more than 71,000 people in some 100 countries.

VINCI Construction's distinctive features, over and above its size, are its:

► diverse array of capabilities in building, civil engineering, hydraulic engineering and contracting-related specialities;

► **business model** made up of three business areas forming an excellent fit: networks of subsidiaries with strong local roots; specialised civil engineering subsidiaries serving global markets; and a division dedicated to the management, design and execution of large, complex projects;

► management model combining decentralisation, networking, local manager empowerment and responsibility, focus on people and responsive organisation.

As a business line of VINCI, the world's leading concessions and construction group, VINCI Construction exemplifies the Group's entrepreneurial culture.

Networks of local subsidiaries VINCI Construction France VINCI Construction Dom-Tom CFE, Belgium VINCI Construction UK Central Europe subsidiaries Sogea-Satom, Africa

Specialised civil engineering activities

Soletanche Freyssinet Deep foundations and ground technologies, structures, nuclear Entrepose Contracting Oil and gas infrastructure DEME Dredging and marine works

Management and execution of complex projects

VINCI Construction Grands Projets VINCI Construction Terrassement Dodin Campenon Bernard



Revenue in € millions



15,327



Net income attributable to owners of the parent in € millions

421

71,324 Employees of which 35,410 in France



hours of training

(Data at 31/12/2012)



ECONOMIC PERFORMANCE NETWORKS AND EXPERTISE FORMING AN EXCELLENT FIT

VINCI CONSTRUCTION TURNED IN ANOTHER SOLID PERFORMANCE IN 2012. OWING TO OUR BUSINESS MODEL, WHICH BRINGS TOGETHER NETWORKS OF LOCAL SUBSIDIARIES, GLOBAL SPECIALITY BUSINESS ACTIVITIES AND ENTITIES DEDICATED TO MAJOR PROJECTS, WE WERE ABLE TO WEATHER THE TOUGH BUSINESS ENVIRONMENT IN EUROPE AND CONTINUE EXPANDING OUR ACTIVITIES INTERNATIONALLY.

NETWORKS OF LOCAL SUBSIDIARIES

Mainland France

Following the substantial upturn in 2011, VINCI Construction France recorded a 7.4% increase in revenue to $\in 6.5$ billion.

Building. After 16% growth in the previous year, the building activity, which accounts for half of VINCI Construction France's revenue, increased a further 6.5%. Growth was especially strong in the Greater Paris area and in the south-east. VINCI Construction France companies made the most of their comprehensive market coverage – covering service sector, functional and residential buildings – to pursue a strategy of offering public and private sector

contracting authorities the broadest possible range of new construction and renovation services, from major design-build to local repair projects.

Civil engineering. In a shrinking market, business activity increased 8%, primarily driven by the SEA Tours-Bordeaux high-speed rail line project. Alongside the other VINCI Construction and VINCI divisions, a large number of regional and local VINCI Construction France entities are involved in the project, on which 5,000 Group employees were working at year-end.

Hydraulic engineering. Volume held up well in markets that were contracting due to the

VINCI Construction France 2012 revenue

in € millions:



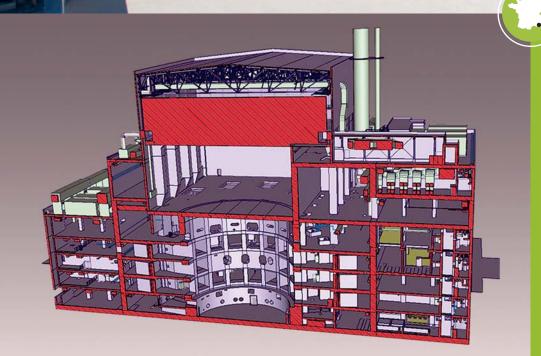
Workforce: 23,924 Building and civil engineering leader in France. 467 profit centres. Building, civil engineering, hydraulic engineering and speciality business activities.

VINCI Construction

Dom-Tom 2012 revenue in € millions:



(2011: 542) Workforce: 2,372 Operating overseas for 50 years. 28 subsidiaries in the Indian Ocean, Pacific Ocean, French West Indies and French Guiana.



1

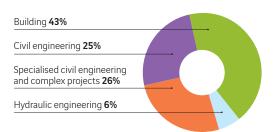
CADARACHE, FRANCE TOKAMAK REACTOR BUILDING, ITER PROJECT

11

VINCI Construction companies have long been involved in the construction of France's nuclear power plants and are currently working to build the facilities that are paving the way for future energy development. At the Cadarache site in southern France, they have performed a first series of works on the future Iter complex, the largest-ever experimental nuclear fusion tokamak. As part of the same project, VINCI Construction won the contracts to install the antiseismic bearings and build the Tokamak reactor building, in 2011 and at the end of 2012 respectively. The latter, a 28 metre diameter, 29 metre high cylinder weighing 23,000 tonnes, will, together with its two adjoining secondary structures, constitute a 120 metre long, 80 metre wide, 80 metre high reinforced concrete building.

12 ECONOMIC PERFORMANCE

VINCI Construction revenue by business sector



••• difficulty experienced by local authorities in financing projects. The decline in standard pipeline works, especially in rural areas, was partly offset by work to divert and reconnect utility networks in conjunction with urban development (light rail) and high-speed rail line works, and by investments in water treatment facilities.

Overseas France

VINCI Construction Dom-Tom increased its revenue 7.3% to €582 million in markets buoyed by uninterrupted public investment in buildings (healthcare, education, public housing) and water treatment facilities, and by the many projects in the traditional markets that make up the core business of the local subsidiaries. The subsidiaries also worked on large projects carried out in cooperation with VINCI Construction France and the VINCI Construction major projects division.

Benelux

CFE (excluding its 50%-owned subsidiary DEME), which is held 46.8% by VINCI Construction, recorded a 3.4% increase in revenue to €916 million. Building activity grew in Belgium but declined in Central Europe and the export markets due to a number of delayed project starts. In civil engineering, business was notably driven by the major projects carried out by the VINCI Group under concession contracts. The property development activity in Belgium and Luxembourg held steady at a satisfactory level. Business was stable for the multi-technical engineering and maintenance division and increased in the rail and road division due to the acquisition of Remacom, a company specialising in track laying.

PORTS OF COTONOU AND LOME PORT ENGINEERING Sogea-Satom and VINCI Construction

Sogea-Satom and VINCI Construction specialised subsidiaries Soletanche Bachy, Dredging International and EMCC pooled their complementary expertise to work on the port rehabilitation and extension project in Cotonou, Benin *(pictured above)*, financed by the Millennium Challenge Corporation. Following completion of the project, Bénin Terminal, the concession company for the port's new container terminal, awarded the \in 23 million contract to build the south quay platform to Sogea-Satom. Meanwhile, Group companies began construction of the third container berth in the port of Lomé in Togo, involving 1.9 million cubic metres of dredging works and construction of a 450 metre quay wall, under a \in 42.5 million contract *(pictured opposite)*.







CFE 2012 revenue





(2011: 886) Workforce: 3,682 Multi-disciplinary group: PPP-concessions. construction, property, marine, rail & road, and multi-technical engineering. Historic roots in Belgium and international operations.

VINCI Construction uĸ 2012 revenue

in € millions:



All construction sectors. Operating in the United Kingdom for 90 years.

Central Europe subsidiaries 2012 revenue



(2011: 520) Workforce: 2,144 Brings together local subsidiaries located in: · Poland: Warbud; Czech Republic: SMP. Prumstav and Freyssinet CZ; Slovakia: SMS and APS Alkon.

Sogea-Satom 2012 revenue in € millions:



 $(2011 \cdot 861)$ Workforce: 8,261 Roadworks, hydraulic engineering, civil engineering and building. Historic roots in about 20 African countries.

United Kingdom

VINCI Construction UK, despite an economic environment that remained extremely tough, continued to increase its revenue (up 6.5% to €1,365 million) and position itself in its most buoyant market segments. In building, business was brisk in the hospital, university and retail building sectors. In civil engineering, volume was high in urban transport infrastructure, with major projects under way on the London Underground (notably in synergy with VINCI Construction Grands Projets and Bachy Soletanche Ltd) and in Nottingham. VINCI Construction UK also consolidated its positions in airport infrastructure.

Central Europe

The three Central European subsidiaries

recorded a 7.7% decline in revenue to €480 million due to the general economic downturn. In Poland, motorway works in cooperation with Eurovia and several significant projects in the public and private sector building markets supported activity at Warbud. In the Czech Republic, where the economy was in recession and major road infrastructure programmes were completed, SMP branched out into water treatment by acquiring a specialised company and winning the contract to build a wastewater treatment plant in Bohemia. In Slovakia, following the completion of the PR1BINA expressway, a new motorway contract won as part of a Eurovia-led consortium should help drive activity at SMS in 2013.

Africa

Sogea-Satom's revenue continued to grow, with a 10.4% increase to €950 million in markets where private-sector investments are taking the place of funding by the major international donors. Making the most of the longstanding roots and high quality expertise that have enabled it to hold its own in a highly competitive environment, Sogea-Satom maintained a high level of activity in all its business sectors. The company's strength in roadworks and earthworks, which account for more than half of its revenue, continued with a large number of construction and refurbishment projects. Group synergies also generated sustained business in port civil engineering and industrial building works. When the other VINCI Construction subsidiaries operating in Africa are included (especially in specialised civil engineering and oil and gas infrastructure), VINCI Construction generated revenue of €1,388 million in 2012, unchanged from 2011.

SPECIALISED CIVIL ENGINEERING ACTIVITIES

Soletanche Freyssinet

At Soletanche Freyssinet, revenue rose 12.9% to €2.5 billion as a result of both organic growth and acquisitions. In each of its business activities (ground technologies, structures, nuclear), Soletanche Freyssinet's specialised expertise is an international benchmark, positioning the company in major infrastructure projects around the world. Business was particularly brisk in the United States, Canada, Australia, Mexico and France. Volumes declined substantially in the Middle East, the Iberian Peninsula and Central Europe, where markets were contracting, but held steady, overall, in Asia, Latin America and Africa. Soletanche Freyssinet's targeted acquisitions strategy enabled it to consolidate and expand its international networks in the Americas (United States, Canada, Colombia), New Zealand, South Africa, and Central Europe (Czech Republic and Slovakia). The company set up new subsidiaries in Peru, Kuwait and the Philippines.

In deep foundations and ground technologies,

Soletanche Bachy recorded 15% growth, driven by the performance of its subsidiaries in France and North America. The company also benefited from the smooth integration of the entities acquired in 2011 in Canada, the United Kingdom and Turkey.

At Menard (ground consolidation), volumes held steady. The company worked on major projects around the world.

In structures, Freyssinet's business activity

increased despite the market downturn in Central Europe and Spain, which was offset by good performance in the United Kingdom, North America and Australia.

Terre Armée (retaining structures and prefabricated arch tunnels) recorded a substantial increase in revenue, with business growth especially high in North America.

In nuclear, Nuvia again recorded strong growth, up 17%. In addition to brisk business in its two main markets, France and the United Kingdom, the company was bolstered by new business in China and the subsidiaries recently set up in Canada and Sweden. Soletanche Freyssinet 2012 revenue in€ millions:



Workforce: 15,363 World leader in ground technologies, structures and nuclear engineering. Five brands: Soletanche Bachy, Menard, Terre Armée, Freyssinet and Nuvia. Operations in about 100 countries.

Entrepose Contracting

2012 revenue in € millions:



(2011: 675) **Workforce:** 4,196 Specialist in complex industrial design-build projects and transport and storage solutions. Oil and gas sector, more generally the energy and environment sectors.

DEME

2012 revenue in € millions:



(2011: 1,766) **Workforce:** 4,200 50% owned by CFE. Dredging and marine engineering leader. 150 years' experience around the world.





With a length of 60 metres and a width of 38 metres, the *Neptune* is a heavy-lift jack-up vessel equipped with a 600 tonne crane that is fully integrated into the hull. Particularly well suited for the transport and installation of offshore wind turbines, it was built by IHC Merwede for GeoSea, a subsidiary of DEME (CFE) specialising in offshore construction. It carried out its first assignment on the Thornton Bank off the Belgian coast, where it installed 48 wind turbines as part of the second and third stages of the C-Power offshore wind farm project.



Oil and gas infrastructure

Entrepose Contracting recorded a 12.4% increase in revenue to €759 million, partly as a result of external growth and despite postponement of a number of investments by contracting authorities. Work on pipelines, provided by Spiecapag, remained buoyant thanks to the very large project under way in Papua New Guinea. Strong oil and gas field commissioning activity continued apace in Algeria. In liquefied natural gas (LNG) storage tanks, Entrepose Contracting continued work on a large project in France and won a new contract in Australia, in synergy with VINCI Construction Grands Projets.

In addition, to consolidate its positions in the buoyant underground liquid and gaseous hydrocarbon storage market, Entrepose Contracting raised its stake in subsidiary Geostock, a world leader, from 25% to 90%.

Dredging

DEME⁽¹⁾ maintained a high level of revenue, at €1,748 million, and raised its order book to a historic high – up 38% in one year – primarily as a result of major energy and port infrastructure contracts in Australia and Qatar and an offshore wind farm project in Belgium. Meanwhile, DEME continued to upgrade its fleet, which comprises nearly 100 large dredgers and 200 auxiliary vessels. The Neptune and the Innovation, two large offshore construction vessels, and the Ambiorix and Amazon ocean-going rock cutter dredgers were brought into service in 2012.

(1) The DEME Group is 50% owned by CFE, which is 46.8% held by VINCI Construction. DEME is accounted for under the equity method in accordance with IAS 31 "interests in joint ventures".

COMPLEX PROJECT MANAGEMENT AND CONSTRUCTION

The companies making up this division offer an excellent fit in complex project design, engineering, management and construction. In 2012 they were primarily involved in the SEA Tours-Bordeaux high-speed rail line project. A total of 5,000 VINCI Group employees were working on the project within the construction joint venture, COSEA, in which VINCI Construction is the main company.

VINCI Construction Grands Projets put in a good performance in 2012, marked by return to growth, with revenue up 10.8% to €570 million and a continuing high level of order intake. At the end of the year, the order book stood at almost $\in 2$ billion, i.e. more than two years of business activity. The map of projects under way or won in 2012 reflects uninterrupted business activity in the countries where VINCI Construction Grands Projets has a long-standing presence (France – particularly with the SEA HSL -, the United Kingdom, Egypt, Qatar, Jamaica, Malaysia, Trinidad and Tobago) as well as business in countries where it has more recently begun operations, such as Chile, Australia, Hong Kong and Panama. The types of project carried out illustrate both the sound positions held by the company in the major bridges and tunnels, underground works and hydraulic works markets, as well as its more recent expansion into the international market for major building projects.

VINCI Construction Terrassement generated revenue of €496 million, up 31.4%, driven primarily by a large number of projects carried out simultaneously along the SEA Tours-Bordeaux HSL, which accounted for a volume of work valued at more than €350 million in 2012 for the company, which leads the COSEA joint venture. Regional business activity in France also increased, as did activity in international markets, mainly driven by a project carried out in conjunction with Sogea-Satom in Equatorial Guinea.

Dodin Campenon Bernard increased its revenue 16.2% to €227 million. In addition to taking part in the SEA HSL projects, the company worked in synergy with the other VINCI Construction entities on a large number of civil engineering projects in France. VINCI Construction Grands projets 2012 revenue

in € millions: **5770** (2011: 515) Workforce: 4,821 Heir to companies going back a century. Major international project references. Design and construction of complex civil engineering structures and buildings.

VINCI Construction Terrassement 2012 revenue in € millions:

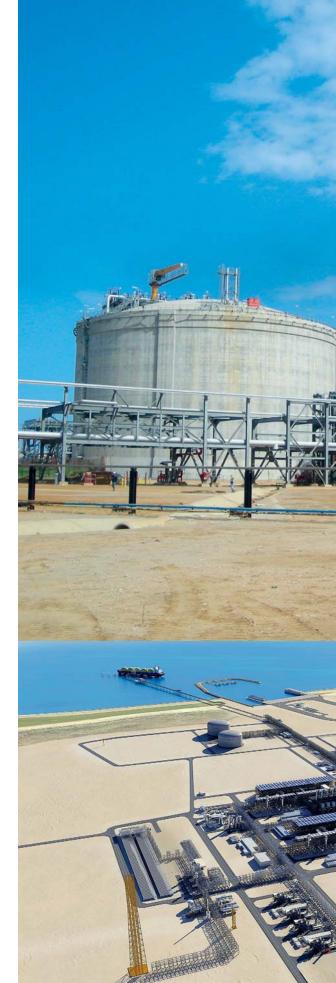


(2011: 377) **Workforce:** 2,059 Covers all business activities related to earthworks-centred infrastructure and development works, including standard engineering structures and drainage.

Dodin Campenon Bernard 2012 revenue



(2011: 196) **Workforce:** 560 Designs and executes major civil engineering and underground works projects in France in partnership with VINCI Construction France and the other business lines of VINCI's Contracting business.





ALGERIA, AUSTRALIA LIQUEFIED NATURAL GAS TANKS

VINCI Construction delivers the full range of expertise required to build liquefied natural gas (LNG) tanks, from civil engineering works to steel tank manufacturing. After completing three storage units for a liquefaction facility in Skikda, Algeria (*pictured above*), Entrepose Contracting and VINCI Construction Grands Projets won a €400 million contract to build four tanks as part of the Wheatstone project in Australia (*pictured opposite*) as part of a consortium with an Australian company. DEME is also taking part in the project, performing dredging works required for the construction of the new terminal.

VINCI Construction revenue by geographical area

France 55%	
United Kingdom 12%	
Africa 9%	
Belgium 5%	
Other European countries 8%	
Americas 5%	
Rest of the world 6%	

OUTLOOK

VINCI Construction's year-end order book stood at €18.1 billion, suggesting that overall business volumes can be expected to hold steady in 2013. The ramp-up of the SEA Tours-Bordeaux HSL project will bolster business activity in France. It is expected that the other networks of local subsidiaries will also achieve volume similar to that of 2012 and hold up well in the European markets; that brisk business activity will continue unabated in Africa; and that the specialised civil engineering and major projects businesses, which have recently stepped up the pace of internationalisation, will continue to expand, especially outside the European Union. In all the areas where VINCI Construction operates, better collaboration between its divisions will help to extend its market coverage, as significant contracts recently won worldwide have demonstrated. Joint bids will be drawn up to meet demand for comprehensive solutions on the part of large contracting authorities, and engineering, management and production resources will be networked

As the size of projects increases in most markets, VINCI Construction's ability to marshal the full range of technical capabilities and execution resources required will be an increasingly decisive strength.

Looking beyond the short term and the effects of budgetary policies in Europe, VINCI Construction will benefit, over the long haul, from strong demand in the sectors in which it operates: transport and energy infrastructure, urban development, water supply and treatment systems, public buildings (healthcare, education, recreation), and newgeneration residential and service sector buildings.

SYNERGIES JOINING FORCES AND ADDING VALUE

BY POOLING ITS CAPABILITIES MORE BROADLY, DEVISING NEW WAYS FOR ITS PEOPLE AND COMPANIES TO WORK TOGETHER AND FOSTERING MOBILITY ACROSS THE BOARD, VINCI CONSTRUCTION WILL BE MAKING THE MOST OF ITS HUMAN RESOURCES AND EXPERTISE AND DEVELOPING THE TURNKEY SOLUTIONS ITS CUSTOMERS EXPECT.

INTERNATIONAL



"Our potential for expansion largely lies ahead of us."

Bruno Dupety, chief operating officer of VINCI Construction in charge of international development

"Several recent successes demonstrate

our substantial potential for international expansion. This is especially true in countries where one of our companies is already operating, which enables the entire Group to benefit from its experience and gain access to projects in different sectors or on a different scale. For example, when we win a new contract for a bridge over the Panama Canal or a new section of the Hong Kong metro, our specialised companies' local presence and experience on previous projects are invaluable. Our local subsidiaries, speciality business activities and major projects teams also work together when we build a

mining tunnel in Chile, liquefied natural gas tanks in Australia and port infrastructure - we currently have several such projects under way - in Africa. Our potential for international expansion largely lies ahead of us, for several reasons. First of all, VINCI Construction has far fewer operations in the wider international market than in Europe. Secondly, our Group's profile is in keeping with the market trend towards more comprehensive and complex projects, especially under PPP contracts. Just as our companies are now able to carry out a megaproject like the SEA HSL in France within the VINCI Group, accelerated synergies among our divisions should enable us, in future, to take on large projects in other countries. The same approach applies to projects of all sizes. The more closely we work together from the bidding phase onwards and pool our project design, production and management capabilities, the better we will meet our clients' expectations."



Human resources The Group hired

23,886

people under all types of contract in 2012, including 10,118 permanent jobs.





HONG KONG SYNERGIES IN UNDERGROUND WORKS

Soletanche Bachy has been working in recent years on the Express Rail Link project in Hong Kong, building some of the foundations at the Kowloon terminus and a 270 metre long cut-and-cover tunnel. The experience acquired on this project and on many previous projects provided input for the Group's bid on one of the contracts for the new SCL rail line, which it won at the end of 2012 *(see page 67)*.

HUMAN RESOURCES



"Expanding international mobility."

Hervé Meller, director of human resources, VINCI Construction

"Every VINCI Construction division has its own human resources network and

management tools. But to support the expansion of the business line – and especially its international expansion – we need shared tools enabling us to better meet companies' skills requirements and accommodate employees' requests for mobility. We are therefore putting together a CV database and a mobility database for VINCI Construction as a whole. Mobility primarily takes place within divisions today, and these tools will help us to develop skill and geographic mobility across our divisions. We are also setting up a network of mobility correspondents located in major regions throughout the world that will also help us to better match up skills requirements and mobility requests without necessarily going through head offices. We will have achieved our objective when a Korean business unit manager can, for example, take advantage of an opportunity to head a major project in a different Asian country. We will apply the same approach to recruitment, creating a website designed from the start to have an international scope, under VINCI Group auspices. And lastly, we are thinking about ways to enhance the position of project director - a key function in our business activities - notably by making it easier to move between this job and other operational responsibilities."



"Network resources and generate resonance."

Joseph Attias, director of engineering, VINCI Construction

"VINCI Construction entities have a rich and varied technical culture at the cutting edge of all areas of expertise. They allocate their engineering resources to their projects the way integrated design offices do. But we are also working on networking our resources, starting with the baseline activities that cut across all the entities ground technologies and structural works. In 2012 we convened a meeting of the main design office managers in these specialities - a group of more than 1,000 highly qualified people representing all our entities, bar none. We are creating a community of VINCI Construction civil engineers covering both new construction and the promising field of engineering applied to existing structures. The goal is to continuously amplify our technical performance culture, applying it to projects of all sizes and all degrees of complexity. By networking our engineering resources and bringing them into resonance we generate an "arc" attuned to our customers' expectations.

The increasing use of design-build, EPC, ECI and PPP contracts is leading us to be involved earlier in the project process. We can then leverage our standout engineering services to deliver innovative and alternative solutions that will optimise projects. In a nutshell, by networking our engineering resources we create value for customers and our companies alike. Our strengthened engineering capabilities actively participate in winning contracts, controlling technical risks and improving the results of our projects."



2,000 employees will be tr

employees will be trained under the "Managing Safety" programme in 2013.





" Involve management and share the same safety culture."

Jean-Philippe Bréot, director of health and safety, VINCI Construction

"After a long period of steady progress,

and despite the major resources we have devoted to accident prevention, our safety results have been flat in recent years. We have therefore undertaken a Group-wide, in-depth effort to improve them. The programme is driven by manager involvement. The goal is to see to it that supervisory staff are not only "focused on" accident prevention but also actively "involved" in it, since they are primarily responsible for safety. To achieve this, we have designed and rolled out the "Managing Safety" training programme for all Group managers (see page 27). Meanwhile, we have also set out the essential principles that underpin our Safety Culture in a document circulated to all employees with a cover letter from the chairman. It codifies VINCI Construction's commitment to a set of rules and actions common to all our companies that can be adapted to cover all countries and business activities. We are also encouraging our health and safety specialists to share their experience by regularly convening meetings of our international network, which are systematically attended by the VINCI Construction Management Committee. The programme is beginning to bear fruit in several places where our safety results are improving. We must be persistent in our push to make rapid progress towards our goal of Zero Accident."



SEA HSL, FRANCE 3D illustration of the Dordogne viaduct, the longest bridge on the SEA HSL at 1,319 metres.

DIGITAL MOCKUPS NEW COLLABORATIVE SOFTWARE

Building information modelling (BIM) software facilitates collaboration among project participants – architects, design offices, general contractors and subcontractors – at all stages of design and construction.



SPECIAL SYSTEMS FOR MAJOR PROJECTS

For the SEA HSL, the COSEA construction joint venture rolled out IT infrastructure enabling all project participants to use the same databases and drawings in their work. The software includes a geographic information system and supports digital access to all 3D drawings. Computergenerated images notably facilitated the work of the "consultation managers" giving presentations to local authorities to describe the many structures that will reconnect utility networks and roads affected by the project.

DATA SHARING AND PROJECT OPTIMISATION

In the BIM process, a database comprising the project specifications is set up at the outset and the project manager, design offices and companies add information to it as the project proceeds to ensure that all data is available to all participants through the main interface, the 3D image. This collaborative process fosters project optimisation and helps keep schedules and costs under control by supporting a shared understanding of the overall project from the design phase onwards and better interface management throughout the project.

MULTIPLE APPLICATIONS

Group companies are increasingly using BIM on their projects in France and abroad. Tools of this type were employed by VINCI Construction France on the Louis Vuitton Foundation for Creation project in the Paris Rive Gauche development zone (island T8) in Paris; by VINCI Construction UK in the renovation and extension of the Tottenham Court Road Underground station in London; and by VINCI Construction Grands Projets on the new airport terminal in Dushanbe, Tajikistan.

SUSTAINABLE DEVELOPMENT AIMING FOR ALL-ROUND PERFORMANCE

IN ASSESSING OUR PERFORMANCE WE LOOK BEYOND OUR ECONOMIC AND FINANCIAL RESULTS AT THE VALUE WE CREATE FOR OUR EMPLOYEES, FOR THE ENVIRONMENT AND FOR SOCIETY AS A WHOLE.

PRINCIPLES

Our responsibility as a group of builders

VINCI Construction aims to create all-round value. As builders, we have a duty to consider the purpose of our projects while meeting the expectations of users and the community at large. To address climate change we must expand the environmental value of our projects. In measuring our performance, we look at the extent to which our projects and worksites blend into the fabric of local communities and contribute to social and economic development. To put this vision into practice, VINCI Construction, like all VINCI business lines, strives to reach out to all project stakeholders and engage in dialogue with them. The VINCI Group's Manifesto spells out this approach.

A NEW MANIFESTO

The Group's new Manifesto, signed by VINCI Chairman and Chief Executive Officer Xavier Huillard, was published in 2012. It sets out the commitments made by all VINCI companies to all their project stakeholders. The new document builds on the first Manifesto published in 2006, which focused on workforcerelated and social responsibility. This latest Manifesto broadens the commitments to cover all aspects of successful projects, including environmental and energy performance, workplace health and safety, and ethical conduct.





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> In north-western Burundi, Sogea-Satom is providing support for the communities along the RN9 highway being built to open up the mountainous region on the edge of the Kibira forest. To ensure that everyone can safely share the road during and after its construction, coveral cafety and an and the set of the s 4,000 children. They then become "RN9 Messengers" to pass along what they have learned to communities unused to vehicle traffic. In addition, local residents are invited to attend AIDS prevention meetings alongside locally recruited employees. Sogea-Satom is also rolling out a comprehensive waste treatment system and holding "Environment



24 SUSTAINABLE DEVELOPMENT

Entrepreneurial culture and humanist values.

VINCI Construction believes that lasting economic success must be based on an ambitious human project. Because we are builders, our humanist values are rooted in our culture. Trust, respect, solidarity, the primacy of people over systems and the simultaneous recognition of individual initiative and teamwork – the fundamental principle of the worksite – are central to our identity as a group of entrepreneurs.

Management method and collective

performance. Across VINCI Construction's diverse business activities, locations and people, our distinctive management method underpins our cohesion and drives our development. Our model is built on decentralised organisations, autonomous operating units and empowered managers. The inviolable principles of fairness and transparency underpin the trust we place in our managers. Our model fosters individual performance within a clearly defined set of rules. We encourage employee initiative and network our teams and expertise to promote cross-business operations and a projectbased approach.

Our group is multi-local and multi-cultural.

VINCI Construction encompasses 1,000 companies operating in over 100 countries. We have stepped up our international expansion in recent years and will continue to do so going forward. We build momentum by making the most of the strong and lasting roots we have put down in the countries where we operate and by recruiting local managers and respecting each country's culture. As partners in local development, our companies directly and indirectly help create wealth and jobs. They contribute to economic and social solidarity in the areas where they operate.

TRAINING INTERNATIONAL WORKSITE SCHOOLS

We recruit large local teams to participate in our international projects and their skills and capacity for teamwork are crucial to the smooth operation of our worksites. VINCI Construction Grands Projets set up the Skill Up programme to address this need. Under this programme, training centres geared to the requirements of each project are set up to develop the knowledge and skills of local employees (workers, crew leaders and foremen). The Skill Up programme was rolled out on three worksites in 2012 – in Turkmenistan (government building, *pictured opposite*), Malaysia (Berjaya project) and Chile (El Teniente mine, *pictured addove*).







Employment 71,324

employees at 31 December 2012, of which:

54,988 under unlimited-term contracts



12 % women

HUMAN RESOURCES

Career opportunities for every employee.

VINCI Construction's human resources policy aims to give every employee an opportunity for promotion within the company. Employees acquire their skills primarily in the field and hone them throughout their careers by taking advantage of our ambitious training policy, which builds employability. The Group's management method fosters promotion. A skilled worker can, for example, rapidly become a crew leader and then a foreman. Similarly, a young engineer who performs well may, within a few years, become a contract manager or the head of a works agency. Upward mobility is based on merit rather than educational background and the most effective employees can reach top management positions within the Group.

Training and dissemination of a common

culture. VINCI Construction companies devote very substantial resources to training, which is seen as both a way to improve individual and collective performance and as a tool for sharing a common technical and managerial culture. In-house training centres play a key role in this programme. For example, in France more than 17,000 trainees were given nearly 300,000 hours of training at the 10 Cesame (VINCI Construction France) centres and the Eugène Freyssinet centre. Group synergies make it possible to share training resources. For example, the Orchestra programme on worksite preparation and organisation was initially developed by VINCI Construction France to train its operational managers and then extended to further entities (VINCI Construction Dom-Tom, Central Europe subsidiaries, Sogea-Satom, management and execution of complex projects and specialised civil engineering activities). VINCI Construction companies are also developing training programmes for project management teams, including Team Grands Projets (VINCI Construction Grands Projets) and PM+ (Soletanche Freyssinet).

SAFETY

Safety culture, management involvement and

common rules. To ensure that safety becomes a culture common to all our entities, VINCI Construction's health and safety policy builds on the strong involvement of management, starting with the chairman and the VINCI Construction Management Committee, who convene a meeting of the Group's health and safety experts for dedicated seminars three times a year. The policy is based on rules and principles that apply to all VINCI Construction entities:

1 - People are the company's focus and its foremost asset.

► Safety is an ongoing concern. It is an integral aspect of every decision.

► VINCI Construction applies a Zero Tolerance approach in ensuring compliance with the safety rules.

► Sharing both successes and failures is a primary prerequisite for success.

2 - Primary responsibility for safety and for providing safety leadership rests with the general management of VINCI Construction and of each of its entities.

► Managers set a safety example.

► Top management is present and watchful on the ground.

► Safety is one of the criteria used to assess managerial performance.

3 - Training is an essential tool for ensuring that every employee takes the VINCI Construction safety culture on board.

► Every operational manager receives training in safety management.

- ► Every new employee receives initial safety training.
- ► Job training systematically includes a safety component.

4 – Safety is central to each stage of the construction project.

 \blacktriangleright No safety compromises are accepted in the design phase.

- ► Worksite preparation and methods are approved before the work gets under way.
- ► Every change in operating method during the execution phase is subject to an approval procedure.

Action plans and multiple initiatives. These

rules underpin the many action plans and initiatives taken by companies and operating entities, which are tailored to their specific geographic and cultural features.







and safety matters 50% of employees received training





For example, VINCI Construction France held an "Exemplary Day" event on 26 October 2012, in which all employees of the 1,763 projects under way nearly 19,000 people - took part simultaneously. Meanwhile, VINCI Construction UK continued its Step-up training programme, which raises each employee's awareness of his or her "personal safety footprint" and has brought about a substantial improvement of the company's safety results in recent years. VINCI Construction Grands Projets continued the rollout of its system for identifying and analysing "accident precursors" on its worksites; and in an extension of the "Managing Safety" training taken by all supervisory staff, Sogea-Satom recruited some 20 employees to reinforce its network of health and safety experts across all the countries where the company operates.

EQUALITY AND DIVERSITY

Reflecting the social diversity of each country.

Our employees' wide variety of backgrounds and broad range of experience are an integral part of our culture. Our companies strive to ensure that their workforce reflects the diversity of the countries in which they operate. In keeping with this approach, we pursue a pro-active equality policy to combat all forms of discrimination in hiring and labour relations, with particular attention to discrimination against women, disabled people, older people and people of immigrant background. In this way, we strive to create a working environment in which all employees, in all their diversity, are given an opportunity to make the most of their abilities and help the company achieve its goals.

Fostering work integration. VINCI Construction companies support social solidarity by recruiting people alienated from the job market. To support them, particularly in cases of public procurement integration clauses, VINCI set up its subsidiary ViE in 2011 to serve as an interface between the Group and the social and solidarity organisations that recruit people under integration programmes and provide initial training for them. In 2012, its first full year in operation, ViE was involved in workforce development on 87 projects (notably the SFR head office and the Canopée des Halles in the Greater Paris area and the Denain urban renewal project in northern France), which accounted for 1.35 million hours of work. ViE provided direct support for

28 SUSTAINABLE DEVELOPMENT

•••712 people in work integration programmes. Special integration programmes are also being implemented on major projects, such as the SEA HSL (see page 31).

Retention of disabled employees. The Trajeo'h non-profit set up in France by VINCI fosters redeployment and retention of employees unable to continue in their jobs following an accident or a work-related illness, as well as recruitment of disabled people. The organisation is active in the Greater Paris, Rhône-Alpes, Auvergne, Burgundy, Franche-Comté and Provence-Alpes-Côte-d'Azur regions, and it opened a new delegation in Upper Normandy in 2012. During the year, Trajeo'h supported 173 pre-assessments and redeployed 92 disabled employees.

CIVIC ENGAGEMENT

From "working together" to "living together".

VINCI Construction companies see their social responsibility as lying not just in "working together" with economic stakeholders but also in "living together" with the communities around them and in solidarity with those who are having the most trouble finding their place in this "living together" space. Our approach to civic engagement is based on this conviction.

In France, the approach has been put into practice for the past 10 years by the Fondation VINCI pour la Cité, which works with organisations combating exclusion. The Group provides funding and Group employees serve as sponsors. In 2012, the foundation provided a total of €1.71 million in funding for 141 projects, which were sponsored by 201 employees. VINCI Construction companies and employees were very actively involved in these efforts, and especially in the Cité Solidaire programme, which was extended to four further cities (Grenoble, Le Havre, Rennes and Champigny sur Marne) in 2012.

Outside France, sister foundations have been set up along the same lines as the Fondation VINCI in recent years in the Czech Republic, Germany and Greece and in 2012 in Belgium and Slovakia.

In Africa, the ISSA (Sogea-Satom's Initiatives for Africa) programme, set up in 2007, supports solidarity actions initiated by Sogea-Satom agencies and worksite teams. Projects focus on access to



CIVIC ENGAGEMENT

The Cité Solidaire programme brings together a city, the Fondation VINCI pour la Cité and VINCI companies operating locally to support associations working to forge community ties in underprivileged neighbourhoods in France. It works by issuing calls for projects. Launched in 2010, the programme combines employee and Group company sponsorships. It has put down strong local roots and VINCI Construction teams are heavily involved in it. It began with Saint Denis (*pictured above*) and then spread to Argenteuil (*pictured opposite*), Sarcelles, Tourcoing and Vitry sur Seine, all in the Greater Paris area, followed by the cities of Grenoble, Le Havre, Rennes and Champigny sur Marne.



essential services (education, healthcare, water, electricity) and support for economic initiatives, especially the creation of microenterprises that generate work and jobs for local populations. In 2012, ISSA supported 27 projects with more than €440,000 in funding. These notably involved the purchase of a press to produce compressed earth bricks for sale in Benin; equipment for a company set up to recycle printer cartridges in Burundi; and the refurbishment of a centre for underprivileged children in a Pretoria, South Africa neighbourhood.

VINCI Construction companies also engaged in a large number of local actions in France and abroad. For example, QDVC rebuilt a school in Eritrea as an extension of the hotel construction project on an island in the Dahlak Archipelago.



Solidarity projects

Fondation VINCI pour la Cité projects were supported by 57 VINCI Construction sponsors and received €752,900 in funding in 2012.

27 projects were

projects were supported by ISSA (Sogea-Satom's Initiatives for Africa), receiving €440,000 in funding.

ENVIRONMENT

Limiting the environmental impact of our business activities. VINCI Construction's business activities are closely related to the challenges of green growth and, as a global major, we have special responsibility to respond to them. In all the countries where we operate, our companies strive to reduce the impact of their activities by meeting the highest environmental standards. The broad range of actions taken to this effect include worksite waste screening and recycling; installation of water treatment units to reduce worksite impact on aquatic environments to a minimum; rollout of dedicated signs to conserve biodiversity on VINCI Construction Terrassement worksites; and environmental certification of worksites based on commitments, with compliance audited by an expert (e.g. the Attitude Environnement programme at VINCI Construction France). Impact reduction is also fostered by ISO 14001 and equivalent certifications, which cover 60% of VINCI Construction's revenue, and by environmental training (10,156 hours conducted in 2012).

Eco-design of buildings and infrastructure.

VINCI Construction companies continue to develop eco-design tools for structures and infrastructure that include life cycle analysis (LCA). A rail module was added to CO2NCERNED, which focuses on major transport infrastructure projects, in 2012. Soletanche Freyssinet has also developed specific eco-design software (PRISM, used for 26 projects in the tender phase and 15 in execution), as has VINCI Construction Grands Projets (CO2CRETE Impact and GEStim), and VINCI Construction France (Equer) ••• for the energy performance evaluation of buildings. In this last field, the Oxygen eco-offer, which covers all project stages (building design, construction and use) and includes energy and environmental performance commitments, has been implemented on some 20 projects in France.

INNOVATION

R&D and operational innovation. VINCI

Construction companies implement an innovation policy focused on meeting the expectations of their markets and optimising the solutions they offer their customers. It includes design methods, construction techniques and exclusive products and processes such as those devised by the specialised civil engineering business activities. At the end of 2012, VINCI Construction's innovations were covered by 1,625 active patents. VINCI Construction companies also take part in research programmes bringing

INNOVATION INTEGRATED HARNESS

The work overalls with integrated harness, which won the Paris Region Special Skilled Worker Prize in the most recent VINCI Innovation Awards competition, was designed by three Soletanche Bachy employees (Karine Maglica, Philippe Jauffret and Christelle Monteiro). The harness facilitates safe work at height. It is incorporated in high-visibility work overalls and can be easily removed and re-attached so the overalls can be washed and the harness checked or replaced. The individual protection equipment is being disseminated among the various



together their own teams, their partner networks and PhD candidates working within the Group. Current research topics include concrete durability performance analysis (French PERFDUB project); concrete cracking in large components (French CEOS.FR project); and eco-concrete (formulated with low CO₂ emissions). The VINCI Group also encourages operational innovation in all areas (technology, safety, sustainable development and working conditions) via the VINCI Innovation Awards Competition held every two years and open to all employees. The awards foster the dissemination of innovations throughout the Group. For example, Escalib, a safe and functional worksite staircase developed by Campenon Bernard Régions (VINCI Construction France) won the Rhône-Alpes region Dissemination prize in the 2011 competition.

Collaborative research in eco-design and the

sustainable city. The Chair in Eco-design of Buildings and Infrastructure set up by VINCI and the ParisTech engineering school group in 2008 with a budget of €3 million over a period of five years, continued its research work in 2012, with a particular focus on the environmental quality of buildings and neighbourhoods and energy management strategies for buildings. The two partners organised the Chair's first seminar as well as several meetings attended by educators, VINCI employees and outside partners. Meanwhile the Fabrique de la Cité (City Factory), a think tank set up at VINCI's initiative, continued its work bringing together a wide range of stakeholders involved in urban development and mobility issues. The main topics addressed in 2012 were public acceptance, the role of cities in the energy transition and urban infrastructure financing.





10% of the hours worked will be earmarked for people in work integration programmes or alienated from the job market.





SEA HSL A WORKFORCE DEVELOPMENT AND ENVIRONMENTAL PROJECT

The SEA Tours-Bordeaux high-speed line, set to become one of the largest rail infrastructure projects of our time, has geared up to make an exceptional workforce development and environmental effort.

RECRUITMENT AND TRAINING

The COSEA construction joint venture has undertaken to locally recruit and train 1,200 people (the actual number will exceed 1,400), of which 400 registered on work integration programmes. To achieve this, a special public-private partnership was set up by COSEA, government departments, regional and departmental councils, local authorities, chambers of commerce and industry and work integration companies. By the end of 2012, 1,000 people (two-thirds of whom met the integration through work criteria) had been hired. Nine training hubs - five for earthworks and four for civil engineering - had been set up along the route. In their first nine months of operation, they trained nearly 900 people.

SILLON SOLIDAIRE

On its own initiative, COSEA, later joined by concession consortium LISEA, worked with the Fondation VINCI pour la Cité to create a project-specific endowment fund, known as Sillon Solidaire, with an annual budget of €300,000. The fund provides financial assistance and employee sponsors to support non-profit organisations combating social exclusion in the regions along the SEA line.

BIODIVERSITY CONSERVATION

Nearly 220 protected species were identified along the route of the SEA line. LISEA and COSEA worked from the initial studies onwards with biodiversity groups in the regions to reduce the impact of the project as much as possible and to define offset measures that will be implemented over more than 2,800 hectares. Environmental groups are training worksite personnel. The LISEA Biodiversity Foundation, set up in 2011, will provide long-term support for conservation and natural habitat restoration projects in the three regions and six departments through which the HSL will run.



Over



Projects with a value of



billion covered by certification

(HQE, BREEAM, etc.), i.e. 19.6% of overall revenue; 74% of revenue covered by ISO 9001; 60% of revenue covered by ISO 14001.



workplace accident frequency rate for VINCI Construction as a whole in 2012, down 20% in one year.

2012 PROJECT HIGHLIGHTS

PROJECT HIGHLIGHTS BUILDING

OFFICE BUILDINGS

VINCI Construction France worked on many projects - for the most part large scale - in the Greater Paris area. In Paris La Défense, its companies continued the rehabilitation of the Eqho (formerly Descartes) tower and launched the construction of the new 37-storey, 54,000 sq. metre D2 tower, which will be handed over in 2014. In Saint-Denis, it handed over the Cité du Cinéma, a project developed, co-financed and built by the VINCI Group, and launched the operational phase of work on the new SFR headquarters being built by VINCI Construction France for VINCI Immobilier. The first phase of the four-building complex with a total surface area of 133,000 sq. metres will be handed over at the end of 2013. VINCI Construction France also began building the 36,000 sq. metre T8 island in the Paris Rive Gauche mixed development zone, and started the occupied-site structural renovation and raising of the 15,500 sq. metre, five-level building in Saint Mandé that will serve as the new headquarters of the Institut Géographique

D2 TOWER, PARIS LA DÉFENSE

The 180 metre, 37-storey building topped by a metal structure will accommodate 54,000 sq. metres of office space. VINCI Construction France is building it as general contractor, with Soletanche Bachy providing the foundations.

QUAIS D'ARENC PROJECT, MARSEILLE

Located in the Euroméditerranée business district, this project includes a 9,000 sq. metre, eight-level office building and three towers, two of which are under construction.





National and Météo France, a project with a value of €30 million. New orders booked during the year included renovation of the 37,000 sq. metre Pasteur building complex in Paris' 15th arrondissement; renovation of the 17,500 sq. metre, 10-storey Green Avenue building in Nanterre; the second phase of the 14,500 sq. metre Lendit operation in the Landy-Pleyel mixed development zone in Saint Denis; the 49,000 sq. metre New Vélizy programme, under a €106 million contract in Vélizy Villacoublay; and the future head office of the Agence Nationale de Sécurité Sanitaire under a contract that includes building maintenance for a period of 25 years, in Maisons Alfort. The major operations in the French regions included the 18,000 sq. metre Quatuor project built under VINCI Construction France's Oxygen eco-design programme in Lille; and the Quais d'Arenc project in Marseille. Located in the Euroméditerranée business district near the CMA-CGM tower built by the Group, this last project includes a 9,000 sq. metre, eight-level office building and three towers, two of which are under construction. In the same district, a consortium including VINCI Construction France won the €50 million contract to build the new Euromed Center II business and services complex comprising 51,500 sq. metres of office space and a 210-room hotel



"To me, the Cité du Cinéma is a philosophical and fraternal process. The VINCI team got it right away. Afterwards,

as an artist I had to learn about the technical constraints and the technical people had to learn how to translate what I had in mind. We moved ahead in unison to work out the solutions."

Luc Besson, chairman of EuropaCorp and founder of the Cité du Cinéma.



SAINT-DENIS, FRANCE CITÉ DU CINÉMA

The Cité du Cinéma project, developed by VINCI Immobilier and built by Bateg (VINCI Construction France) as general contractor in cooperation with VINCI Energies, was handed over in April 2012. The vast 62,000 sq. metre complex contains nine sound stages, a screening room, a covered street, offices and common monumental central aisle of which was comprehensively refurbished.



36 BUILDING



MONACO ODEON TOWER

With its 48 levels of office and residential space, the Odeon tower will rise to a height of 160 metres and be the principality's tallest structure. A consortium comprising VINCI Construction France, VINCI Construction Grands Projets and Soletanche Bachy is building the project on a general contracting basis. Following the particularly complex deep foundation phase (featuring a 25,000 sq. metre concrete diaphragm wall enclosing 10 parking levels), the structural works are proceeding as an up-and-down project (construction of five above-ground levels for each underground level).





"The site is on a steep hill and exposed to earthquakes and landslides, so the underpinning, deep foundation and superstructure design had to be closely coordinated."

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Daniel Viargues, chairman of Soletanche Bachy France

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KUALA LUMPUR, MALAYSIA BERJAYA CENTRAL PARK

Having completed the very large Berjaya Times Square residential and retail complex in the 2000s, VINCI Construction Grands Projets is currently building the 185,000 sq. metre Berjaya Central Park apartment and office complex in the Malaysian capital for the same customer. The first phase, which got under way in 2011, covers the turnkey construction of a nine-storey podium and a 46-storey office tower as well as the structural work on a 48-storey apartment tower for the Ritz Carlton. About 1,000 people are working on the project.

VINCI

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FREE

In Monaco, the general contracting consortium made up of Soletanche Bachy, VINCI Construction Grands Projets and VINCI Construction France continued work on the Odeon tower.

In Belgium, CFE continued work in Brussels on the second phase of the Pole Star project, a 14-storey H-shaped building, and the structural renovation of an 11-storey building in Frère Orban square with 22,000 sq. metres of office space and 5,000 sq. metres of residential space.

In Central Europe, Warbud won new contracts in Poland to build the 105,000 sq. metre Plac Unii office and retail complex in Warsaw; and Prumstav in the Czech Republic was awarded the contract for the Karlin Hall II office building in Prague.

VINCI Construction Grands Projets started work on two projects that illustrate its expansion in the international market for large buildings. These are the new 54,000 sq. metre, seven-storey government building in Ashgabat, Turkmenistan, which contains a 500-seat Council Room; and the Berjaya Central Park in Kuala Lumpur, Malaysia.



NEW COVENT GARDEN MARKET, LONDON

The complex in Vauxhall will be the United Kingdom's largest fruit, vegetable and flower market. During the first phase of the project, VINCI Construction UK will be part of the consortium building a 50,000 sq. metre building complex.

PRIVATE-SECTOR BUILDING

In shopping centres, in France, VINCI

Construction continued the Terrasses du Port project in Marseille. When completed, it will be Europe's largest shopping centre, comprising six underground parking levels with 2,800 parking spaces and two three-level buildings with a total floor area of 96,000 sq. metres. The project required construction of 600 linear metres of diaphragm walls and 301 preformed piles. VINCI Construction France also started work on the 110,000 sg. metre Aéroville shopping and services centre in the Greater Paris area, which will accommodate 200 retail outlets, 25 restaurants and a multiplex cinema, and launched the second phase of the 17,500 sq. metre Rives d'Arcins shopping centre in Bègles in southwestern France.

In the United Kingdom, a highlight of the year was the award of the contract to build the New Covent Garden Market, the UK's largest fruit, vegetable and flower market, in London's Vauxhall district. During the first phase of the project, VINCI Construction UK will be working within a consortium building a 50,000 sq. metre complex under a £130 million contract. VINCI Construction UK also continued to work with Tesco on several shopping centre construction and extension projects, particularly in London (Streatham Hub project) and Hednesford, Staffordshire.

40 BUILDING

In the hotel market, VINCI Construction France continued work on the prestigious The Peninsula Paris hotel; the structural refurbishment of an early 20th century building will result in a hotel with 200 luxury rooms and suites. The company also began construction of a new 25-storey, 369-room four-star hotel for VINCI Immobilier in La Défense (value of the contract: €68 million). In French Guiana, Nofrayane (VINCI Construction Dom-Tom) started construction of the 134-room Royal Amazonia hotel in Cayenne.

In industrial buildings, the new Renault plant and its ancillary buildings were completed in Morocco. The Group marshalled its teams to complete the first phase of the project to a very tight schedule, enabling the plant to start production in the first quarter of 2012. VINCI Construction then won the general contract for the second phase. In Poland, Warbud built the extension of the Lodz plant for the Gillette Group.

In cultural and heritage buildings, VINCI Construction continued work on the technically complex Louis Vuitton for Creation Foundation building in Paris, which will open in the Jardin d'Acclimatation in 2014. Two VINCI Construction building subsidiaries (Petit and GTM Bâtiment), Dodin Campenon Bernard and VINCI Construction Grands Projets pooled their complementary expertise to build the innovative structure designed by architect Frank Gehry.

ROYAL AMAZONIA HOTEL, FRENCH GUIANA

Nofrayane (VINCI Construction Dom-Tom) won the general contract to build the Royal Amazonia Hotel & Resort in Cayenne. The three-star hotel will feature 134 rooms, a swimming pool, a spa, a tennis court and conference rooms. Work will take 19 months to complete.



RENAULT PLANT, TANGIER

Renault was able to start production at its new plant in Morocco in the first quarter of 2012 thanks to the major effort made by VINCI Construction teams working closely with the customer to meet a very tight schedule. VINCI Construction continued with the second phase of the project as general contractor.



URBAN DEVELOPMENT

In France, the Les Halles renewal project got into full swing in 2012 (see opposite). VINCI Construction France companies also continued refurbishment work on the Halle Pajol (equipped with 3,500 sq. metres of photovoltaic panels, it will be France's first urban solar power plant), and a major project in the Claude Bernard mixed development zone comprising 103,000 sq. metres of residential and office space. In Lyon, they handed over the Lyon Confluence leisure, shopping and hotel complex, with a roof made up of 24,000 sq. metres of transparent air cushions that will change colour according to the amount of light while ensuring efficient thermal insulation. In the French regions, they continued work on the Carré Feydeau project in Nantes with 13,000 sq. metres of shops, 6,000 sq. metres of residential space and 520 parking spaces, developed by VINCI Immobilier and Adim, the VINCI Construction France financing subsidiary; in Hautmont (Nord department), they worked under a comprehensive contract awarded by the municipality to renovate 459 housing units, two schools, three community centres and a municipal building, as part of a project set for completion in 2013.

In Belgium, the consortium led by BPC (CFE) continued construction of the UP-site complex in the new Canal area in Brussels, the European capital's largest private-sector project currently under way. Work includes construction of a 140 metre, 42-storey residential high-rise, four office buildings with a total area of 30,000 sq. metres and four residential buildings covering 36,000 sq. metres over three parking levels.



"This operation is above all a challenge in terms of management and organisation, which enables us to demonstrate our ability to put a project together."

Fernando Sistac, executive vice-president, VINCI Construction France





PARIS, FRANCE LES HALLES URBAN RENEWAL PROJECT

The sinuous, vegetation-inspired "canopy" will serve as a monumental roof and the emblem of the renewal of the Les Halles district in the heart of Paris – a project designed by architects Patrick Berger and Jacques Anziutti, who won the competition held in 2007. The canopy structure will rest on two 15 metre high buildings, which will house City of Paris cultural facilities, on either side of the patio formed by the Les Halles shopping centre. As part of the €150 million contract, a VINCI Construction France consortium made up of Chantiers Modernes Construction, GTM TP Île-de-France and TPI is responsible for managing the overall project and providing the civil engineering works and comprehensive technical and logistical support for metal fabricator Fayat, the subcontractor responsible for building the canopy itself. The consortium also awarded the contract covering structural reinforcement of the shopping centre to Freyssinet.

HOUSING

VINCI Construction France built a large number of projects of all sizes for developers and privatesector customers. The largest included: as part of the Rives de Seine project, the D3a island with 334 housing units in Boulogne Billancourt; 166 housing units built on landscaped terraces between the Grande Arche and the River Seine in La Défense-Nanterre; a 305-unit housing complex for Spirit Promotion in Aubervilliers; the 312-unit Entrevert eco-neighbourhood in La Valette in southern France; the Neomed City project with 206 housing units and 143 rooms for students as part of the Joliette urban renewal project in Marseille; and the Rives de Sainte Valdrée eco-neighbourhood, as part of an urban brownfield renewal project in Nancy.

In public housing, the year's projects included a social housing complex for young workers comprising 172 studios in Savigny le Temple; the 85-unit Paul Éluard residence in Rosny sur Seine; the Madrinius programme with 95 housing units and 3,100 sq. metres of shop and office space in Margny lès Compiègne; and the Faubourg Duchateau urban renewal project involving rehabilitation of 390 existing units and construction of 263 new units in Denain in northern France. This last project includes a major workforce development component with 45,000 hours of work to be performed by people participating in work integration programmes.

In Overseas France, Nofrayane in French Guiana and Sogea Réunion and SBTPC on Reunion Island carried out a large number of new construction and renovation housing projects.

CFE built many residential buildings in Belgium and also continued the Château de Beggen residential programme in Luxembourg and a residential tower for an oil company in Nigeria.

In the United Kingdom, VINCI Construction UK started work on a project in London's Streatham district that includes 250 housing units, a sports complex and a shopping centre. The company also won new contracts for residential projects in Cambridge (134 apartments and shops) and Cardiff (construction of a 380-room student dormitory and a fire brigade barracks).





NICE, FRANCE ALLIANZ RIVIERA

VINCI Concessions is building the new stadium in Nice under a PPP contract. The project involves four regional VINCI Construction France companies (Dumez Côte d'Azur, GTM TP Sub Construction, Company the structure's wood slat cladding. Bold creativity and eco-design come together in this project by architect Jean-Michel Willmotte, with its natural climate control system using the prevailing winds in the Var plain and photovoltaic panels that make the facility energy positive. The structural work was completed at the end of 2012 and handover is scheduled for 2013.

PUBLIC BUILDINGS

France

In the hospital sector, VINCI Construction France worked on a large number of projects, including the Necker-Enfants Malades hospital in Paris (55,000 sq. metre Laennec medical and surgical centre) and the new Lagny-Marne la Vallée hospital (75,000 sq. metres, 585 beds) in the Greater Paris area; the Vinatier hospital centre (construction/rehabilitation of the 333-bed adult psychiatry unit) in Greater Lyon; the 52,000 sq. metre, 480-bed Ambroise Paré/Paul Desbief hospital in Marseille; the Pasteur 2 hospital (165,000 sq. metres, 700 beds) in Nice; the new Chambéry hospital (72,000 sq. metres, 670 beds) in the Savoie department; the 13,000 sq. metre Valenciennes hospital rehabilitation institute in the Nord department; and the Troyes hospital extension (17,000 sq. metres, 430 beds) in the Aube department.

In the education sector, VINCI Construction France completed the new ENSTA (Ecole Nationale Supérieure de Techniques Avancées) campus in Palaiseau and continued work on the four new buildings of Paris Diderot University with a total surface area of 44,600 sq. metres – two projects carried out under public-private partnerships (PPP) in the Greater Paris area. During the year it also won a major contract in cooperation with VINCI Energies to renovate the eastern sector of the Jussieu campus, comprising 12 buildings with 41,000 sq. metres of laboratories and 28,000 sq. metres of classrooms, lecture halls and offices, under a contract with an overall value of €150 million. In the French regions,



ENSTA, PALAISEAU

PIERRES VIVES.

MONTPELLIER

VINCI Construction France handed over the

ambitious Cité des Savoirs

et du Sport pour Tous

building, a community

Vives neighbourhood designed by architect

Zaha Hadid.

centre in the new Pierres

Built under a publicprivate partnership, the new campus of the École Nationale Supérieure de Techniques Avancées at the École Polytechnique site in Palaiseau includes a classroom and research building, 432 housing units and a gymnasium. VINCI Construction continued work on the new IEP and INSA university campus in Le Havre and handed over the Nathalie Sarraute middle school, with a 550-pupil capacity, in Aubagne.

In functional buildings, VINCI Construction France completed the ambitious Cité des Savoirs et du Sport pour Tous building designed by Zaha Hadid, a centrepiece of the new Pierres Vives neighbourhood in Montpellier. Elsewhere, several dozen PPP projects developed on the basis of VINCI Construction France's project structuring capabilities were under way in 2012, involving construction/renovation and maintenance of public buildings – mainly gendarme stations and care homes.

In cultural buildings, business activity was particularly brisk. Two outsized projects were a particular focus: the new Museum of European and Mediterranean Civilisations in Marseille (see page 44); and the Confluences Museum in Lyon, a long building with an unusual shape made up of a steel "cloud" frame and a glass "crystal" floating 8 metres above a concrete platform. In Paris, the new Department of Islamic Art at the Louvre Museum, which involved substantial special foundations work, was handed over in the course of the year. VINCI Construction France and Soletanche Freyssinet combined their expertise to build these large museum buildings, which required substantial civil engineering works due to their size and technical complexity.





"No other project in Europe showcases the technical potential of concrete the way this one does. We have never built a structure as

demanding in terms of quality – tolerances were less than 1 millimetre, for example."

Éric Tollini, works director, Dumez Méditerranée (VINCI Construction France)



MUCEM, MARSEILLE, FRANCE CONCRETE IN ALL ITS FORMS

MuCEM, the new Museum of European and Mediterranean Civilisations, will open in June 2013, in the year when Marseille is the European Cultural Capital. The architectural symbol of the city's renewal. Its structure and the fine lacework that enclose its southern and western facades post-tensioned ultra-high performance fibre reinforced concrete (UHPFRC). The carried out by a consortium made up of VINCI Construction France regional subsidiary Dumez Freyssinet (Soletanche Freyssinet), which specialise<u>s in</u> complex structures post-tensioning techniques. The building's standout features include its 309 branching posts, elongated organic shapes for which about 30 moulds were sculpted.



"Set in a mineral orientalist landscape, the MuCEM makes a point of using a single material whose density and fragility highlight its

mechanical strength. We reinterpreted the high-performance material, which is typically employed in bridges and tunnels, for use in the building industry, by exploiting its potential in both structural works and building envelopes."

Rudy Ricciotti, architect of the MuCEM



In major sports facilities, especially stadiums, business was equally brisk. In Le Havre, VINCI Construction France completed the design-build 25,000-seat Grand Stade stadium with its bluish membrane and the 1,500 sq. metres of solar cells on its roof that make it France's first energy-positive stadium. In Nice, work was also intense on the 35,000-seat Allianz Riviera stadium, the first of two new stadiums to be built under public-private partnership (PPP) contracts in the run-up to the UEFA Euro 2016 championship; the structural work was completed at the end of the year and handover is scheduled in 2013. In Bordeaux, VINCI Construction France started work on the new 40.000-seat stadium that will also host UEFA Euro 2016. New orders included the new Arena de la Communauté Urbaine in Dunkerque, comprising two halls with a total seating capacity of 10,700, to be built by VINCI Construction France as part of a consortium under a partnership agreement signed by VINCI. New contracts were also won for the Centre National des Sports de la Défense in Fontainebleau, covering rehabilitation of six buildings and construction of 40,000 sq. metres of sports facilities under a contract that includes 30-year site maintenance; and the construction of an aquatic complex in Montauban.

In Overseas France, the main projects under way during the year were the 900-pupil Capesterre middle school and the Renée Lacrosse medical centre in Guadeloupe. New projects started or won included the new 40,000 sq. metre Fort de France teaching hospital in Martinique, the Stella Matutina Museum in Saint Leu on Reunion Island, an administrative detention centre in Mayotte and the

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EUROPEAN SCHOOL, BRUSSELS

CFE is part of the consortium carrying out the major redevelopment project at the fourth European school in Brussels, which includes renovation of nine existing buildings and the construction of eight new buildings.

STELLA MATUTINA MUSEUM, REUNION ISLAND

SBTPC (VINCI Construction Dom-Tom) is part of the consortium handling the reconstruction and 33,000 sq. metre extension of the museum. Located in Saint Leu, it is devoted to the history of the local sugar cane industry. The project is scheduled for completion at the end of 2013. major Koutio medical centre project in New Caledonia *(see page 49).*

In Belgium, CFE began work on a new building complex in Charleroi under a design, build, finance and maintain contract, which will house the new police headquarters; designed by the Jean Nouvel and MDW architectural firms, the project won an award during the MIPIM international real estate trade show in Cannes. CFE also started work on the new Eeklo hospital and continued work, as part of a consortium, on two school construction/ renovation projects: the fourth European school in Brussels involving renovation of nine existing buildings and construction of eight new buildings; and the schools of the Belgian German-speaking Community in the city of Eupen. The latter project, a 25-year public-private partnership signed by CFE and VINCI Facilities, covers 64,000 sq. metres of buildings (of which 46,000 sq. metres to be built new and 18,000 sq. metres to be renovated) and includes their maintenance for the duration of the contract

In the United Kingdom, VINCI Construction UK worked on a large number of hospital projects, notably under the national ProCure 21+ programme. The main projects included the Royal Oldham Hospital in Manchester, the Community Hospital in Reading, the Lister Hospital in Stevenage, the Kent Medical Institute (under a €54 million contract) and the extension of the Chesterfield Hospital in Bristol. VINCI Construction UK also took part in many projects in the education sector, notably the life sciences university in Bristol, the University of Bath, and schools in Sheffield, Halton and Bradford.







CHAD SYNERGIES IN BUILDING

Sogea-Satom, which has operated in Africa for nearly 80 years and is very active in the roadworks, civil engineering and hydraulic works sectors, more recently branched out into building in synergy with other VINCI Construction entities. After working with the VINCI Construction France teams on the Renault-Nissan plant in Morocco, Sogea-Satom joined forces with CFE International to build the new Toukra University in Chad. The first phase of the project was handed over in 2011 and the second phase got under way in 2012. It involves the construction of six buildings accommodating 26 classrooms and four lecture halls with a total surface area of 27,000 sq. metres. The two partners were also awarded the general contract to build the new 36,000 sq. metre, 10-level headquarters of the Ministry of Finance in N'Djamena. Work began in July 2012 and will be completed at the end of 2014. The value of the contract is €75 million.

In Poland, Warbud continued refurbishment work on the Capitol Theatre in Wroclaw and won two further significant contracts: the new site for the Polish Radio Symphony Orchestra in Katowice, which contains two concert halls with seating capacities of 1,800 and 300 respectively, under a \leq 45.5 million contract; and the Mieczyslaw Karlowicz Philharmonic building in the northwestern city of Szczecin, with two concert halls seating 953 and 192 people respectively, under a \leq 20 million contract.

In Chad, Sogea-Satom and CFE International continued work on the Toukra University project and started work on the Ministry of Finance in N'Djamena *(see box opposite).*

UNIVERSITY IN COVENTRY

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VINCI Construction UK completed the new building for the Faculty of Engineering and Computing at Coventry University. The building's innovative architecture, designed by Arup Associates, has anodised aluminium facades.



HOSPITALS IN EUROPE AND OVERSEAS

VINCI Construction companies are majors in their markets and have the capabilities to carry out large hospital projects. Three recently won contracts are cases in point.



KOUTIO MEDIPÔLE, NEW

CALEDONIA

→ PEDIATRIC HOSPITAL,

WARSAW





HOSPITAL IN KENT

VINCI Construction UK generates a substantial portion of its building activity in the hospital sector. In addition to new contracts won in 2012, the company is building a new hospital complex for the Kent Institute of Medicine and Surgery near Maidstone. The project involves building construction, landscaping and access roadworks. Work got under way in April 2012 and handover is scheduled in early 2014. The value of the contract is €54 million.

20 HECTARE MEDICAL CENTRE IN NEW CALEDONIA

VINCI Construction France (lead company) and SCB (VINCI Construction Dom-Tom), with VINCI Energies providing technical works, started work on the large Koutio Médipôle medical centre project in early 2012. It will bring together a new hospital, the Institut Pasteur de Nouvelle Calédonie, a renal insufficiency treatment centre, a radiation therapy centre and a functional rehabilitation centre on a 20 hectare site. The buildings have a total surface area of 80,000 sq. metres with 450 rooms and 12 operating theatres. The design is scalable to accommodate changing healthcare requirements over time. The first phase of the works will be completed within 46 months.

PEDIATRIC CENTRE IN WARSAW

A Warbud-led consortium is building the pediatric hospital at the Warsaw University medical school under a general contract (excluding technical works packages). The 80,000 sq. metre, seven-level hospital will consist of three buildings connected by a glass-walled passageway and have a total of 527 beds. The works, with a value of €66 million, will be completed in 28 months.

PROJECT HIGHLIGHTS CIVIL ENGINEERING

EARTHWORKS AND TRANSPORT INFRASTRUCTURE

In France, the highlight of 2012 was the ramp-up of the SEA Tours-Bordeaux high-speed rail project. In a demonstration of VINCI's exceptional ability to muster engineering, project management and production capabilities, 5,000 people were working on the project by the end of the year (see page 53). In the rail infrastructure sector, VINCI Construction also continued work on one of the works packages of the East European HSL (Phase 2), a 7.5 km section between Baudrecourt and Vendenheim, involving five of its companies - Dodin Campenon Bernard, VINCI Construction Terrassement, Campenon Bernard Dodin Ingénierie, GTM Alsace and GTM Lorraine - working in synergy with VINCI Energies; the massive earthworks were completed during the year. In road infrastructure, VINCI Construction Terrassement completed two major projects for VINCI Autoroutes:

A89 MOTORWAY, FRANCE

VINCI Construction completed the new section of the A89 motorway in the outskirts of Lyon, with a length of 32 km of standard section, including 7 km running through low mountains.



one, the new section of the A89 on the outskirts of Lyon, covered 32 km of standard motorway, of which 7 km through low mountains; and the other, on the A63 motorway near the Basque coast, involved widening an 18 km section between Ondres and Biarritz without closing the motorway to traffic and was completed in three seasons instead of the four provided for in the contract. In the Ardennes area, VINCI Construction Terrassement, in a consortium with Dodin Campenon Bernard, GTM Lorraine and Eurovia, is to work on a 23.5 km section of the A304 motorway, which extends the A34 to Belgium. VINCI Construction Terrassement also began several national highway widening projects: 6 km on the RN 88 in the Aveyron department, 10 km on the RN 149 in the Deux Sèvres department and 8.5 km on the RN 54 in the Eure et Loir department. In airport infrastructure, SBTPC won the contract to reinforce and widen the runways at Roland Garros Airport in Saint Denis, Reunion Island's main airport.

In Belgium, CFE completed the construction of the Diabolo rail link, which improves service to Brussels-National Airport *(see opposite).*

In the United Kingdom, VINCI Construction UK, which is closely involved in the major London Underground upgrade projects, finished work on King's Cross station and continued or started work on Tottenham Court Road and Victoria stations. The company also worked with VINCI Construction Grands Projets and Bachy Soletanche Ltd to build Whitechapel station as part of the Crossrail project. VINCI Construction Grands Projets and Bachy Soletanche Ltd also continued construction of the tunnels in both Whitechapel and Liverpool Street stations. The second phase of work on the Nottingham light rail concession contract was also launched during the year. In the airport sector, VINCI Construction UK won the €105 million contract to transform Pier 1 in the South Terminal at Gatwick in an extension of work the company had already carried out at the airport.



BRUSSELS, BELGIUM DIABOLO LINK

After five years of works, the Diabolo rail link between Brussels National Airport, the main lines of the Belgian railways and Antwerp, was commissioned in June 2012. MBG (CFE) bored two 1,070 metre tunnels under the airport runway. Three Soletanche Freyssinet subsidiaries also took part in the project: Bachy Belgique and Fontec built the diaphragm walls and Freyssinet Belgium built a prestressed concrete slab.



52 CIVIL ENGINEERING

••• In Poland, Warbud worked with Eurovia on the S5 expressway and A2 motorway projects, which were completed within a very tight schedule for the opening of UEFA Euro 2012. The A2 project, which was taken on by the Eurovia-Warbud consortium following cancellation of a contract initially awarded to a Chinese company, called for a major mobilisation effort. On this 30 km section, 90% of the work was completed in just over a year despite a particularly harsh winter.

In Slovakia, following completion of the PR1BINA expressway, SMS was selected, as part of a Eurovialed consortium, to build a 9.5 km section of the D1 motorway near Levoča including 12 engineering structures and a twin-tube tunnel.

In Russia, VINCI Construction Grands Projets continued to provide programme management support for the construction of the first 43 km section of the Moscow-St Petersburg motorway, a project carried out by VINCI Concessions.

In Tajikistan, VINCI Construction Grands Projets signed a €39 million contract, in a consortium with VINCI Airports, to build a new terminal at the international airport in the capital, Dushanbe. In addition to the design-build construction of the terminal building the contract includes installation of equipment and operating systems.

In Qatar, joint Qatari Diar (51%) and VINCI Construction Grands Projets (49%) subsidiary, QDVC began work on the second phase of the light rail system in Lusail, the new city under construction north of the capital, Doha. This phase covers the civil engineering work on eight underground stations,



S5 EXPRESSWAY, POLAND Warbud worked in synergy with Eurovia to complete the A2 motorway and S5 expressway projects within a very tight timeframe.



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KING'S CROSS STATION, LONDON Among other London Underground stations, VINCI Construction UK renovated King's Cross station, retaining its original architecture while creating new spaces to accommodate growing numbers of passengers.

construction of a viaduct across a motorway and preliminary work on the line's depot and maintenance site.

In Africa, the many road projects on which Sogea-Satom worked included refurbishment of the 98 km Arusha-Minjingu and 67 km Songea-Nantumbo highways in Tanzania; upgrade and asphalt works on the RN9 highway between Bubanza and Ndora to open up access to a part of the mountainous region in Burundi; refurbishment of the RN35 highway between Mahabo and Morondava in Madagascar, which includes construction of 61 hydraulic structures and three crossings, including a bridge with a span of 80 metres. In Equatorial Guinea, the company continued work on the Bata-Ayak N'tang motorway in cooperation with VINCI Construction Terrassement. Also noteworthy were works to refurbish and extend the aircraft parking areas and taxiways at Zanzibar airport, and the earthworks for the hydro-agricultural project in the Dî district that will provide irrigation for 2,000 hectares in Burkina Faso.

In Trinidad and Tobago, VINCI Construction Grands Projets won the third phase of the Churchill-Roosevelt/Uriah Butler motorway interchange, after completing the first two phases in previous years.



302 km is the length of the new South Europe Atlantic high-speed rail line.

4557 bridges and tunnels will be built, including 10,000 metres of viaducts.





FRANCE SEA HSL THE PROJECT OF THE DECADE

The South Europe Atlantic high-speed rail line between Tours and Bordeaux entered the operational phase in 2012. By the end of the year 5,000 people were working on it.

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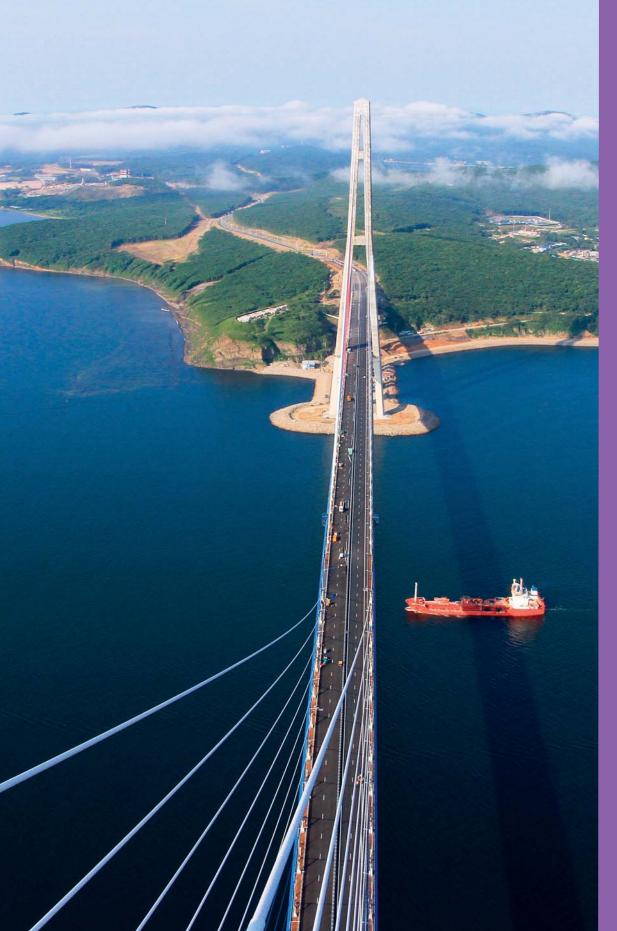
In November 2012, VINCI Construction teams cast the 100th arch segment at the prefabrication plant in Coulombiers near Poitiers. The plant will produce a total of 1,097 standard and 243 special arch segments for the project's seven bridges and viaducts.

A €7.8 BILLION INVESTMENT

The new HSL will be 302 km long and a further 38 km of lines will connect it to the existing rail system. The line represents a total investment of €7.8 billion in current euros, making it the largest infrastructure concession project now under way in Europe. The COSEA construction joint venture – led by VINCI Construction and including Eurovia and VINCI Energies, together with companies operating in the rail sector – is in charge of building it. The project is to be completed in 73 months and the line is to come into service in 2017.

A SERIES OF SIMULTANEOUS PROJECTS

Earthworks and civil engineering works were started simultaneously along the entire route. At the end of 2012, 14 million cu. metres of excavation (of the total 60 million planned) had been completed, as well as 3.7 million cu. metres of fill (of a total 38 million). A total of 84 (of 430) standard bridges and tunnels were under construction or had been completed as well as 15 (of 27) major engineering structures. Five motorway diversions (A85, A10) of the eight that will be needed were open to traffic at the points where they intersect the route of the HSL.





RUSSIA RUSSKY ISLAND BRIDGE

In the spring of 2012, Freyssinet placed the last stay cables – including the longest, with a length of 582 metres – on the new bridge connecting Vladivostok and Russky Island in Russia. To build the 1,872 metre bridge, which holds the record for the world's longest cable-stayed span (1,104 metres), Freyssinet designed, manufactured and installed 168 stay cables with a combined weight of 3,700 tonnes.

••• Soletanche Freyssinet subsidiaries took part in many transport infrastructure projects around the world. Soletanche Bachy continued the metro projects in Singapore, Hong Kong and Kuala Lumpur and won a new contract to build the foundations for an extension of the international airport in Hong Kong. Menard performed ground consolidation works in Poland for the S8 expressway and in Indonesia for the new Terminal 3 aircraft parking area at Jakarta airport. Terre Armée built retaining structures for road infrastructure in Morocco (Mediterranean Expressway), the United States (Central Expressway and I-635 in Texas, I-595 in Florida), India (Ranchi Ring Road); in South Korea, the company built its largest-ever prefabricated arch segment (Techspan) structure on a 2.3 km covered motorway.

BRIDGES

In mainland France, in addition to the many standard bridges and tunnels built for road and rail infrastructure, Dodin Campenon Bernard, VINCI Construction France and Freyssinet completed the new 154 metre span Verdun sur Garonne suspension bridge under a public-private partnership that includes maintenance of the structure for a period of 28 years. In Bordeaux, construction of the Chaban Delmas lift bridge moved into its final major phase with the installation of the central lift span (see page 56). VINCI Construction France also won the contract to build the Cavaillon viaduct in

Freyssinet supplied and installed 288 stay cables for the dual five-lane bridge built as part of the Highway 1 upgrade on the outskirts of Vancouver. the Vaucluse department, a 695 metre long structure across the Durance River, and the Schuman bridge in Lyon, a double bow string bridge across the Saône. Dodin Campenon Bernard handed over the viaducts on the A89 and A63 motorways for VINCI Autoroutes and launched design studies for the construction of the 193 metre long Sormonne viaduct as part of the new A304 motorway project.

On Reunion Island, Dodin Campenon Bernard, SBTPC and Botte Fondations completed a major road bridge over the Saint Étienne River, a composite steel and concrete structure with a length of nearly 700 metres, to replace the previous crossing destroyed by a cyclone (see cover photo).

In Luxembourg, CFE continued work on the second Pulvermühle viaduct for the Luxembourg railways.

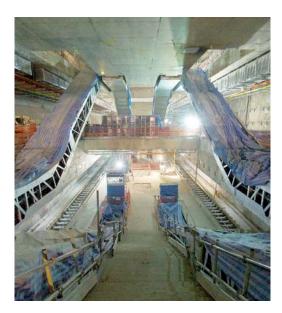
In the international market, Freyssinet applied its specialised construction and repair expertise to a large number of projects. Those completed or worked on during the year included the Russky Island bridge (see opposite) and the Golden Horn bridge in Vladivostok, Russia; the Hammersmith bridge in London; the Liakhvi viaduct in Turkey; the Port Mann bridge in Canada; the San Marco and Frontera bridges in Mexico; the Kumhokang bridge in South Korea; and the Anzac and Adelaide Superhighway bridges in Australia. Advitam, a Soletanche Freyssinet subsidiary specialising in infrastructure monitoring and management, won a Federal Highway Administration contract to monitor the country's bridges - totalling nearly 600,000 structures - in the United States. Last but not least, VINCI Construction Grands Projets won two major contracts in Panama and the United States (see page 67).



SINGAPORE METRO

Soletanche Bachy is in charge of Contract C903 of the Downtown Line serving the Marina Bay business district.





56 CIVIL ENGINEERING



"I have been building bridges for 20 years and this one is the most impressive."



BORDEAUX, FRANCE LIFT BRIDGE OVER THE GARONNE

Work on the Bacalan-Bastide lift after Jacques Chaban-Delmas, who was mayor of Bordeaux for several height in 2012. The 117 metre long, 2,500 tonne central span was placed in October. It can be raised between four pylons to a height of 53 metres above the Garonne to allow passage of high-masted ships and large cruise ships. Following testing and adjustment of the lift system (the lifting operation takes 11 minutes to complete), the structure will begin operating in the first project was designed and built by three VINCI Construction companies (GTM Sud-Ouest TP GC, Campenon Bernard), together with Cimolaï, frame, and EGIS/JMI Michel Virlogeux and Hardesty & Hanover, who provided the design. DEME subsidiary SDI prepared the riverbed.



"In both technical and architectural terms, this is an ambitious structure. The lift span maintains the appeal of the port of Bordeaux. It

improves traffic, saving at least 5 million hours of travel time between the two banks every year. The bridge is part of the Garonne riverbank renewal programme and will facilitate the development of new urban projects on the right bank."

Bertrand Arnauld de Sartre, project manager, Bordeaux Urban Community

TUNNELS

In France, Dodin Campenon Bernard and regional VINCI Construction France subsidiaries pooled their complementary capabilities to carry out a number of projects. The year's completions included the 3,640 metre tunnel extending Paris metro Line 12 between Porte de la Chapelle and Mairie d'Auberbilliers and the VL9 collector main (WP2) for the Siaap wastewater authority in the Greater Paris area. In the Rhône-Alpes region, Group companies handed over the 3,900 metre twin-tube Violay tunnel on the A89 and the 1,800 metre Oullins tunnel on Line B of the Lyon metro under the Rhône River. Again in Lyon, they completed construction of the new 1,730 metre Croix-Rousse tunnel and began renovation works on the existing one. In Marseille, VINCI Construction France completed civil engineering work on the 1,500 metre long Prado Sud cut-and-cover tunnel with two superimposed levels, each with two lanes, which will extend the existing Prado-Carénage tunnel towards the southern part of the city. On the East European HSL line, Dodin Campenon Bernard continued construction of the 4 km twin-tube Saverne tunnel, which has a 9 metre inside diameter. The company also started work on the Romanche-Gavet hydroelectric power plant refurbishment, EDF's largest such project in France.

In Benelux, CFE and VINCI Construction Grands Projets continued construction of two large projects carried out with VINCI under concession contracts:



Built by a consortium comprising VINCI Construction Grands Projets and Bachy Soletanche Ltd, the Lee Tunnel consists of four monumental diaphragm wall shafts – the largest ever built in the UK – connected by a network of tunnels at a depth of 55 to 75 metres.

VIOLAY TUNNEL NEAR LYON

The Violay tunnel, at 3,900 metres the longest twin-tube tunnel on the new A89 motorway section towards Lyon, France, was opened to traffic in January 2013 (pictured here, during an open house event before its official opening).





the new 16.2 km Liefkenshoek rail link (more than half of which runs underground) under the port of Antwerp and the Escaut River, a technically complex structure that will facilitate container transport from one side of the port to the other; and the new Coentunnel in Amsterdam (see opposite).

In the United Kingdom, the consortium formed by VINCI Construction Grands Projets and Bachy Soletanche Ltd continued work on the 7 km Lee Tunnel designed to collect stormwater and wastewater in the eastern part of London. They also began building the tunnels for two stations (Liverpool Street and Whitechapel) on the future Crossrail express line.

In the international market, VINCI Construction Grands Projets completed extension work on the Athens metro in Greece and the Brightwater tunnel in the United States and continued work on the Cairo metro in Egypt and the Hallandsås rail tunnels in Sweden. During the year a major project was started in Chile involving the construction of two tunnels at the El Teniente mine *(see page 60)* and a contract was won for works package 1103 of the new Hong Kong metro line.

Lastly, Soldata (Soletanche Freyssinet) won the contract in the United States to deploy a comprehensive instrumentation system to monitor ground conditions and structural movements on the SR99 tunnel project in Seattle, which will be bored by the world's largest-diameter tunnel boring machine.



AMSTERDAM, THE NETHERLANDS NEW

COENTUNNEL The new Coentunnel in Amsterdam doubles the capacity of the existing structure. The 715 metre long five-lane underwater road tunnel connects the city centre with the northern part of the urban area. Construction was completed in 2012. Once the new tunnel is opened to traffic in the first half of 2013, renovation work will get under way on the existing tunnel.





CHILE EL TENIENTE MINE

world's largest underground copper mine, VINCI Construction Grands Projets and Soletanche Bachy are carrying out the Nuevo Nivel Mina project for Codelco. To create a new two companies are building two new 8.9 km long tunnels at an altitude of about other for ore removal. The two tunnels will run parallel to each other and 22 cross-galleries. Safety was a key criterion in the contract award. The consortium is using the "(A)live on site" safety programme, which gets worksite employees to analyse risky situations based on video footage shot training programme designed for machinery operators and drivers.



"We face a double challenge: working on an industrial site that is in operation, at about 1,500 metres altitude with all the

restrictions that entails, while meeting our customer's safety and performance requirements – for us, a crucial goal."

Lionel Galis, project director, VINCI Construction Grands Projets



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"Chile welcomes foreign investments and encourages companies to participate in its growth. We expect them to work responsibly, with careful attention to worker safety and the environment, which are crucial

issues for us."

Hernán Eduardo de Solminihac Tampier, Minister of Mining, Chile

PORT AND MARINE WORKS

DEME carried out many dredging and marine projects around the world. The main projects included the Gladstone port extension works in Australia, and dredging and hydraulic works to prepare the creation of two artificial islands off the coast of Abu Dhabi in the United Arab Emirates. The company also won three major projects in 2012 that will get under way in 2013 and extend over several years. The first is the Wheatstone LNG project on the west coast of Australia, for which it will be dredging the approach channel, manoeuvring area and berths. VINCI Construction Grands Projets and Entrepose Contracting are also involved in the project (see page 17). The second is the €941 million dredging and breakwater construction contract for a new port in Qatar that will notably accommodate a Qatar Emiri Naval Forces base. The third is the seventh and last offshore wind farm in the North Sea off Belgium (the Northwind project), for which DEME's specialised subsidiary GeoSea is building the foundations and installing 73 steel mono piles. This last order follows on from the C-Power project, a 54-turbine offshore wind farm for which construction got under way in 2008 and will be completed in 2013.

In France, the VINCI Construction France subsidiaries specialising in marine and inland waterway works continued work on many projects

THORNTON BANK WIND FARM, BELGIUM

DEME's specialised subsidiary GeoSea is taking part in the construction of the seventh and last offshore wind farm in the North Sea off Belgium. GeoSea also took part in the construction of the first farshore wind farm at Thornton Bank in the North Sea. This 300 MW wind farm is the world's biggest offshore project of its kind.

BARANGAROO, AUSTRALIA

Menard Bachy is taking part in one of the world's largest seafront development projects, which is transforming a 22 hectare former container terminal into a new precinct in the heart of Sydney.

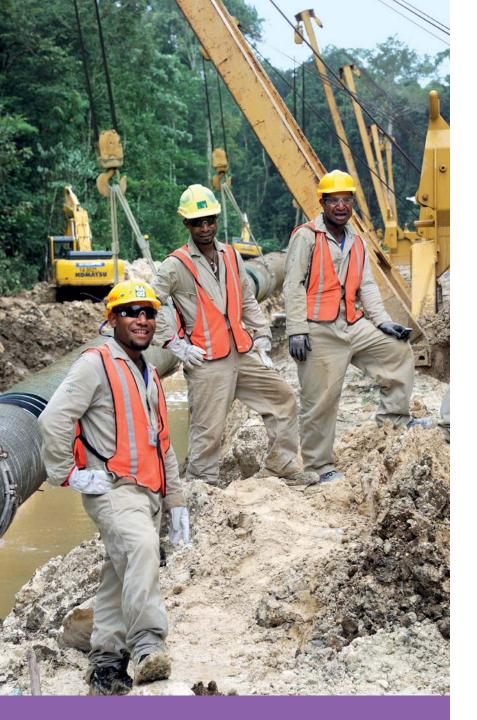




and booked orders for new ones, often in synergy with Soletanche Bachy. They included development of the Bourdonnais port in Paris, construction of the Castel quay in the port of Bayonne, extension of the Quai des Flamands in the port of Cherbourg and the Rives de Saône development project in Lyon.

In Africa, group synergies won the new contract to extend the port of Lomé, Togo, in the wake of a similar project completed in 2012 in Cotonou, Benin *(see page 12).*

Soletanche Freyssinet subsidiaries specialising in ground technologies worked on a large number of port infrastructure projects around the world, including those in Puerto Brisa and Bahia Blanca in Argentina, Montevideo in Uruguay, Jebel Ali (terminal T3) in Dubai, Gemalink-Cai Pep in Vietnam, and Barangaroo in Sydney, Australia – this last one being a vast seafront redevelopment project for which subsidiary Menard Bachy is building the basement wall (a 13,000 sq. metre diaphragm wall and 650 ground anchors).



OIL AND GAS INFRASTRUCTURE

Entrepose Contracting's specialised subsidiary Spiecapag continued the vast 450 km pipeline construction project in Papua New Guinea *(see opposite).* In the oil and gas field sector, the company worked on the Skikda and El Merk sites in south-eastern Algeria, where North Africa's largest crude oil treatment plant is being built, as well as on the Gabes site in southern Tunisia.

In cryogenic tanks, Entrepose Contracting, as leader of a consortium that also includes Soletanche Bachy, continued the construction of three liquefied natural gas tanks with a capacity of 190,000 cu. metres each for the gas tanker terminal in Dunkerque. The company also won the contract to build three 66,000 cu. metre oil tanks at Tuba in south-eastern Iraq. In Australia, a consortium consisting of Entrepose Contracting and VINCI Construction Grands Projets won a contract with a value of about €400 million to build four tanks as part of the Wheatstone project *(see page 17).* Freyssinet also won a contract in Canada to build an offshore oil platform for the Hebron project.

TANKER PORT, DUNKERQUE Construction of three

cryogenic LNG tanks, each with a capacity of 190,000 cu. metres.



PAPUA NEW GUINEA 450 KM PIPELINE

Entrepose Contracting subsidiary Spiecapag, which specialises in the delivery of onshore pipelines, is carrying out its largest-ever project in Papua New Guinea: the construction, for Exxon Mobil, of a 450 km pipeline. The project, with a value of more than \$800 million, includes gas pipeline engineering and construction as well as installation of related equipment (optical fibre, power lines) and construction of some 20 km of access roads. The project is particularly complex due to the site configuration – for the most part located in mountainous and swampy areas devoid of infrastructure – and unfavourable weather conditions.



"We developed a relationship based on mutual respect with the Novarka team. It was difficult to cope with the very unusual context of the project but together we managed, and the spectacular progress we are making is the tangible result."

Igor Gramotkin, director general of Chernobyl Nuclear Power Plant, the project programme manager



UKRAINE CHERNOBYL ARCH

the existing sarcophagus began to take shape at the Chernobyl site in 2012. Built by the which brings together VINCI Construction (lead company) and Bouygues Travaux Publics, the 108 metre high steel arch (equivalent to the height of a 30-storey building) is 162 metres long and has a span of 257 metres. Assembly work is taking place 300 metres from the reactor to protect the teams from radiation. equipped with a dismantling system that will be displaced by overhead travelling to its ceiling. Once assembled, it will be slid over the sarcophagus by hydraulic jacks. All work complies with very stringent radiation protection rules subject to the ALARA (as low as reasonably achievable) principle, which apply across the entire nuclear industry and set an annual dose limit per worker not to be exceeded.

NUCLEAR

In nuclear civil engineering, the year's main project was the confinement shelter for the damaged reactor and sarcophagus at Chernobyl in Ukraine, which is being built by a VINCI Construction Grands Projets-led consortium *(see opposite)*. At the Cadarache site in southern France, VINCI Construction also carried out a first series of development works for the Iter complex, the largest-ever experimental nuclear fusion facility. At the end of the year a consortium made up of VINCI Construction companies won the contract to build the Tokamak reactor building and a series of ancillary buildings *(see page 11)* as part of the same project.

Nuvia deployed its nuclear logistics, dismantling and risk control expertise at EDF, Areva and CEA sites in France. The year's main projects were safety reinforcement at the Fessenheim site and the dismantling of the reactor building at Creys-Malville. With major investments to strengthen the safety of France's nuclear plants planned, Nuvia and VINCI Construction France are working together to develop joint offers covering the full range of operations to be performed. The two partners are, for example, building the containment system for one of the borated water tanks at the Fessenheim power plant. In the United Kingdom, Nuvia continued its participation in the Silos Direct Encapsulation (SDP) project at the Sellafield site, while widening the scope of its activities to include, inter alia, demolition of a radiological research laboratory and participation in the British nuclear submarine dismantling project.



RECYCLING FACILITY, CHARENTE MARITIME

VINCI Environnement is providing processes and technical design studies and Sogea Atlantique (VINCI Construction France) building and civil engineering works for the new multi-process waste recycling facility under construction for the Syndicat Intercommunal du Littoral in France's Charente Maritime department.

WASTE TO ENERGY

VINCI Construction brings together the civil engineering capabilities of its network of local companies and the process expertise developed by VINCI Environnement to offer local authorities and industries comprehensive waste recycling and recovery solutions.

In France, VINCI Construction France and VINCI Environnement are building the Vernea plant in Clermont Ferrand, which has an annual waste throughput capacity of 230,000 tonnes and will handle four processes (mechanical treatment, biological stabilisation, biological recovery, energy recovery). VINCI Construction France and VINCI Environnement also won the €83 million designbuild contract for a multi-process waste recycling and recovery plant with an annual throughput capacity of 97,000 tonnes in the Charente Maritime department.

In Poland, Warbud and VINCI Environnement won the contract to upgrade the Olawa plant in the south-eastern part of the country. The project includes implementation of the anaerobic digestion and dewatering processes, the preparation unit for waste to be treated by anaerobic digestion, and the biogas treatment and recovery unit.



CREYS-MALVILLE, ISERE DEPARTMENT

Nuvia is taking part in the dismantling of the reactor building at the former Creys-Malville nuclear power plant in France.

MAJOR STRUCTURES INTERNATIONAL EXPANSION

In the last quarter of 2012, VINCI Construction Grands Projets won three major international contracts that confirm its expertise in its two historic core activities – large bridges and underground works.



HONG KONG METRO

OHIO RIVER EAST END CROSSING PROJECT, USA

> → ATLANTIC BRIDGE, PANAMA



UNITED STATES OHIO RIVER EAST END CROSSING PROJECT

Under VINCI's first public-private partnership in the United States, a consortium comprising VINCI Construction Grands Projets and Walsh Construction will be building the Ohio River East End Crossing project, a 762 metre cable-stayed bridge over the Ohio River that will connect Louisville, Kentucky with southern Indiana. The contract also includes construction of a 512 metre twin-tube tunnel, 19 standard engineering structures and road improvement and related infrastructure works. The total amount of the contract is nearly \$1 billion. The work will get under way in the summer of 2013 and be completed in the autumn of 2016.

PANAMA ATLANTIC BRIDGE

The Panama Canal Authority has selected VINCI Construction Grands Projets to build the Atlantic Bridge across the canal near the city of Colón. The structure will be the world's longest concrete cable-stayed bridge, with a central span of 530 metres, total length of 1,050 metres, 212.5 metre high pylons and 75 metre vertical clearance to allow large container ships to use the widened canal. The \$366 million contract includes construction of 2 km long access viaducts on either side of the bridge as well as roads to connect the bridge to the existing road network. The work began in January 2013 and will take three and a half years to complete. The contract marks the historic return of a French company to the Panama Canal.

HONG KONG TWO METRO TUNNELS

In association with Soletanche Bachy Hong Kong, VINCI Construction Grands Projets won a contract on the new SCL (Shatin to Central Link) metro line in Hong Kong. The €280 million contract covers construction of 2,475 metres of drill and blast tunnel and excavation of a 1,400 twin-tube tunnel using a 7.4 metre diameter slurry TBM. The work got under way in 2012 and will take 68 months to complete. The new line will cover a route with a total underground length of 12 km. VINCI Construction Grands Projets was previously involved in building the Hong Kong metro between 1998 and 2002, completing the five Black Hill tunnels as part of the metro extension to the new city of Tseung Kwan.

PROJECT HIGHLIGHTS HYDRAULIC ENGINEERING

DAMS

In Egypt, work was initiated on the new Assiut barrage on the Nile under a €266 million contract won by a consortium comprising VINCI Construction Grands Projets (lead company), Arab Contractors and Orascom *(see opposite)* at the end of 2011.

In France, following 42 months of work, VINCI Construction Terrassement handed over to EDF the Rizzanèse dam in southern Corsica built by the Corse Travaux (Eurovia)-Razel-Bec consortium. The 41 metre high dam has a crest length of 140 metres. It supplies a 55 MW hydroelectric plant that will be used to meet peak electricity consumption on the island. The dam's holding capacity is nearly 1 million cu. metres of water. During the year, the new Coudray-Montceaux dam on the Seine 35 km

PANNECIÈRE DAM, FRANCE

Freyssinet reinforced the dam over the Yonne, one of many basins and reservoirs upstream of the Greater Paris area. The project notably involved stabilising the arches by building reinforced concrete counter vaults.



upstream of Paris was also brought into service. Built by a consortium of three VINCI Construction France companies, the entirely automated flap gate dam consists of two 32 metre wide navigable passes, a 13 metre pass and a fish ladder. Meanwhile, Freyssinet completed reinforcement works on the Pannecière dam on the Yonne River in the Morvan area; the project brings the dam into compliance with new seismic regulations.

In Madagascar, Sogea-Satom won the second phase of the Ambatovy dam construction project at a mining site in the centre of the country. The project covers construction of 12 earthen dams and six control dams with a combined length of 2,420 metres and an average height of 20 metres.

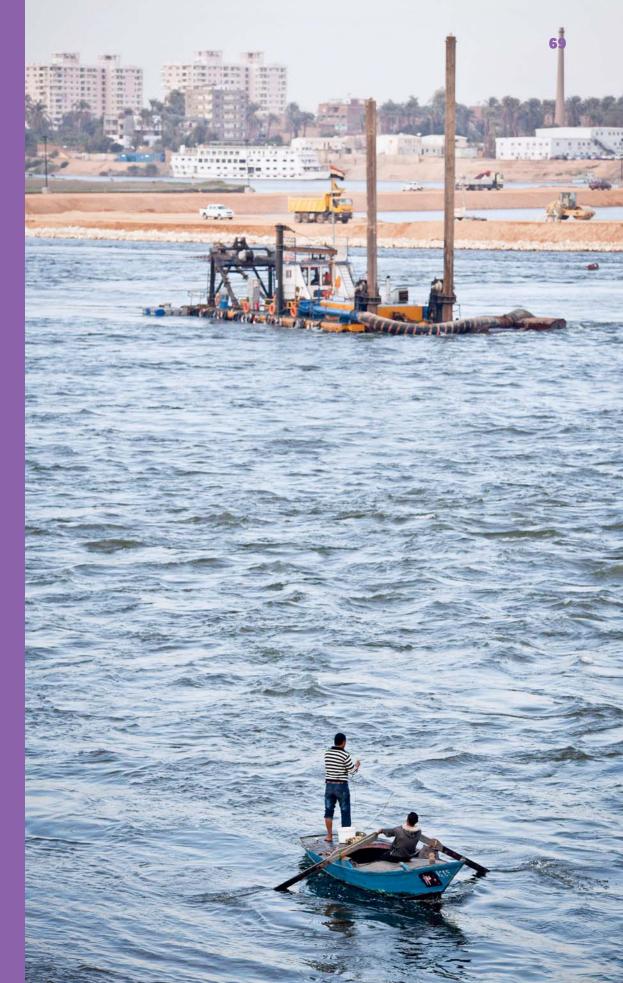
Soletanche Bachy continued repair work on the Wolf Creek dam in the US state of Kentucky, which holds the country's ninth largest reservoir. The project covers construction of a 1,200 metre long diaphragm wall to a depth of up to 85 metres. In India, the company signed a contract to build a watertight cut-off wall on the Subansiri gravity dam under construction in the state of Assam. In Cameroon, it is working in a consortium on the construction of an injected shield (jet-grouted columns) to reinforce a 40 metre high natural dam on Lake Nyos, a crater lake in the north-western part of the country.

Hydroplus, a subsidiary of VINCI Construction Grands Projets specialising in the construction of fusegates, which optimise dam safety and storage capacity, continued work on the Quipolly dam in Australia (to increase storage capacity by 55%) and the Foss dam in the United States. In Mozambique, the company won a new contract to design and install 14 fusegates with a height of 5.80 metres and a width of 11.2 metres on the Massingir dam.



EGYPT ASSIUT BARRAGE

Working under a design-build contract, VINCI Construction Grands Projets is building the new Assiut Barrage on the Nile to replace the existing dam, which dates back to the beginning of the 20th century. The new dam will have four 8 MW turbines. It will have double locks to allow navigation on the Nile and is designed to maintain a head of 4 metres to ensure discharge of a minimum 445 m³/s flow into the Ibrahimia Canal to irrigate nearly 700,000 hectares of land between the dam and Cairo. Work started in May 2012 and will take 64 months to complete.







JAMAICA RENOVATION OF DRINKING WATER SYSTEMS

VINCI Construction Grands Projets has been taking part for several years in the Jamaica Water Supply Improvement Project. In an extension of the first phase of works carried out in recent years (and voted "project of the year 2012" in Jamaica, out of all types of engineering projects on the island), the company won a further phase covering replacement of the water transfer pipes that supply the urban area of Kingston and the rehabilitation of three treatment plants on the northern coast. A further contract was signed in Port Antonio covering the second phase of a project (supply and installation of urban pipelines, dredging works and development of a sea outfall).

DRINKING WATER NETWORKS AND SYSTEMS

In mainland France, VINCI Construction France companies are working on a large number of projects including compliance upgrades, network renewal and maintenance operations, and system diversions in connection with light rail construction projects. They are also carrying out larger projects involving substantial civil engineering work. In the Greater Paris area, for example, they formed a consortium to begin construction of a new 50,000 cu. metre drinking water reservoir with associated structures and connecting pipes; two Soletanche Bachy subsidiaries are also taking part in the project, installing 700 piles and using a TBM to drive a tunnel.

In drinking water plants, VINCI Construction France built the Renaison plant in the Loire region and won two additional contracts in Les Sables d'Olonne (Finfarine production plant) and Greater Reims (Couraux water treatment plant built under a public-private partnership). Pipeline work was also carried out in the Gare de Lyon train station in Paris to supply high-speed trains with drinking water.



LIBREVILLE, GABON

A 1,200 mm diameter pipeline was installed as part of the drinking water network upgrade in the capital of Gabon. In Overseas France, in addition to the large number of pipeline projects carried out by VINCI Construction Dom-Tom, Sogea Guyane continued several projects designed to improve the drinking water supply of the Centre Littoral urban community, including construction of a drinking water production plant in Matiti together with a pumping station and its supply network, as well as work on the 20 km distribution network between Matiti and Cayenne.

In Africa, Sogea-Satom continued a major project in Gabon aimed at improving the drinking water system in the capital Libreville. The project notably includes the installation of iron piping over a distance of 32 km. The alignment requires a substantial amount of additional works such as the construction of overhead crossings and 200 small hydraulic engineering structures. In Cameroon, Sogea-Satom has begun work to extend a raw water treatment and drinking water production plant in Yaounde and raise its capacity to 50,000 m³/day.



MATITI, FRENCH GUIANA

Sogea Guyane is carrying out several projects designed to improve the drinking water supply of the Centre Littoral urban community, including work on a 20 km distribution network between Matiti and Cayenne.

VINCI Construction Grands Projets is working on an increasing number of international water projects. The company won two new contracts in Jamaica to improve the country's water networks (see opposite) as well as a contract in Pakistan to increase drinking water production capacity and improve the operation of the distribution network and the efficiency of commercial service. It continued the project in Djibouti designed to refurbish and extend the city's drinking water network and the drinking water supply improvement project in Trincomalee in the northern part of Sri Lanka.

72 HYDRAULIC ENGINEERING



SAINT CYR L'ÉCOLE, FRANCE

VINCI Construction France is renovating the Carré de Réunion treatment plant and will raise its capacity from 250,000 to 340,000 population equivalent. Work got under way in June 2012 and will take 38 months to complete. **On Reunion Island,** Sogea Réunion and SBTPC worked on several wastewater treatment plants, including the Grand Prado facility in conjunction with VINCI Environnement and VINCI Energies. The new plant, handed over in early 2013, will treat wastewater from the municipalities of Saint Denis and Sainte Marie with a combined population of 190,000.

In the United Kingdom, VINCI Construction Grands Projets and Bachy Soletanche Ltd began work on the Lee Tunnel project that will collect stormwater and wastewater in the eastern part of the London area. In addition to a 7 km tunnel, the project includes the construction of four very large shafts and the supply and installation of the equipment and automation systems required to manage the effluents and raise them more than 80 metres.

In the Czech Republic, SMP won two contracts to extend wastewater treatment plants in Bohemia and the Usti region.

In the Dominican Republic, VINCI Construction Grands Projets began work on a major contract to build wastewater collection, transfer and treatment systems in five municipalities (Monte Cristi, Neiba, Azua, San Jose de Ocoa and San Cristobal). As part of the project it will install 500 km of pipes and design and build eight treatment plants and six pumping stations.

WASTEWATER TREATMENT PLANTS AND COLLECTION SYSTEMS

As in waste-to-energy facilities, VINCI Construction is developing offers for the wastewater market that combine civil engineering and VINCI Environnement's specialised process expertise.

In mainland France, VINCI Construction companies worked on the substantial La Morée treatment plant (which will serve a population of more than 200,000) and the Seine Aval pretreatment plant in Achères (see page 75). They also won a new €85 million contract to renovate the Saint Cyr l'École plant and raise its capacity from 250,000 to 340,000 population equivalent. In the French regions, they continued the second phase of the Louis Fargue plant construction project in Bordeaux and completed a storm basin with a capacity of 12,000 cu. metres for the Montluçon urban community in the Allier area, which will cut the amount of pollution discharged into the Cher River by 40%.

GRAND PRADO, REUNION ISLAND The new plant handed

over in early 2013 was built under a 20-year concession contract and will treat wastewater from the municipalities of Saint Denis and Sainte Marie with a combined population of 190,000.





DOHA, QATAR PUMPING STATION

VINCI Construction Grands Projets, QDVC (the 51% Qatari Diar, 49% VINCI Construction Grands Projets joint subsidiary) and Entrepose Contracting completed the last phase of a sewer project in the northern part of the city of Doha. The project covered construction of the Doha pumping station, the largest such facility in the Middle East, which has a capacity of 900,000 m³/day. It will pump wastewater from the northern part of the city to a treatment plant located 25 km away via three ductile cast iron pipelines that will also be installed as part of the project.



SEINE-AVAL WASTEWATER TREATMENT AND MAJOR CIVIL ENGINEERING STRUCTURES

VINCI Construction companies have been working for many years at Europe's largest wastewater treatment plant, which handles a substantial proportion of the Paris region's effluents.

NITRIFICATION/ DENITRIFICATION UNIT



"The restructuring of the pre-treatment unit is a complex project in terms of its phasing. Maintaining 45 m³/s flow throughout the project is a real challenge."

Jacques Thomazeau, director of the Major Structures Agency, Sogea Génie Civil Île-de-France



70 m³/s is the throughput of the Achères wastewater treatment plant, equivalent to one-third of the flow rate of the Seine.

NITROGEN POLLUTION TREATMENT UNIT

Between 2004 and 2007, a VINCI Construction France-led consortium carried out the design-build construction of the nitrification/ denitrification unit, which treats nitrogen pollution and improves the quality of water discharged from the plant. It took 17,000 tonnes of steel and 145,000 cu. metres of concrete, poured over a period of 18 months, to build the 50,000 sq. metre plant on a 10 hectare site.

RESTRUCTURING OF THE PRETREATMENT PLANT

people will be working on the civil engineering

of the plant's biological treatment unit.

In 2010, a consortium made up of two VINCI Construction France companies - Sogea Génie Civil Île-de-France and GTM Travaux Publics Île-de-France - and Razel-Bec won the contract to restructure the pre-treatment unit for the Siaap wastewater authority (overall contract value: €230 million). The €110 million civil engineering part of the contract, led by Sogea Génie Civil Île-de-France, accounted for five years of work. It called for 14.000 cu. metres of concrete, 3,150 tonnes of steel, 14,000 sq. metres of steel framing and 4,000 sq. metres of wood framing. The new facilities will be handed over in October 2014; overall site commissioning is set for March 2017.

170,000 cu. metres of concrete will be used on the biological treatment train worksite.

BIOLOGICAL TREATMENT TRAIN

In parallel with the pretreatment unit, Sogea Génie Civil Île-de-France, GTM Travaux Publics Île-de-France and Dodin Campenon Bernard have formed a consortium with OTV and Degremont to carry out the civil engineering works for all the facilities carrying out biological treatment of the water passing through the plant. The purpose of the new biological treatment train is to replace the existing facilities with more efficient units that meet the "good ecological status" requirements set out in the European regulations. This part of the Seine-Aval upgrade will involve 12 months of design studies (initiated in January 2012) and 40 months of works at a cost of €406 million. Work will get under way in the summer of 2013.

76 MAIN VINCI CONSTRUCTION COMPANIES

- Networks of local subsidiaries
- Specialised civil engineering activities
- Management and execution of complex projects
- Aannemingen Van Wellen n.v.
- ABO Supply
- Acanthe BTP
- ACTP
- ADIM
- ADIM Côte d'Azur Var
- ADIM Est
- ADIM IDF
- ADIM Languedoc-Roussillon
- ADIM Lyon
- ADIM Nord-Picardie
- ADIM Normandie-Centre
- ADIM Ouest ADIM PACA
- ADIM Régions
- ADIM Sud-Ouest ADIM Sud Provence Languedoc-
- Roussillon Advanced Foundations Systems Inc.
- Aerolac
- AGRA Foundations Limited
- 🔳 Alga Spa
- Amart s.a./n.v.
- APS Alkon a.s.
- Arbonis Construction Arene
- Armor
- Asia Pacific Solutions Ltd
- Ateliers Mainponte



- Bachy Belgique
- Bachy Fondaco Caraibes
- Bachy Soletanche Co Ltd
- Bachy Soletanche Group Construction
- Malaysia SDN BHD
- Bachy Soletanche Group Ltd
- Bachy Soletanche Ltd
- Bachy Soletanche Macau
- Bachy Soletanche Philippines
- Bachy Soletanche Singapore PTE Ltd
- Bachy Soletanche Thailand
- Bachy Soletanche Vietnam Co Ltd
- BAGÉCI
- Baggerwerken Decloedt en Zoon n.v.
- Balineau SA
- Barbaz
- Barriguand
- Barthere
- Bateg
- Benelmat
- Bermingham Foundation Solutions Bessac Andina
- Bessard
- BET LE Joncour
- Bewehrte Erde
- Bonino
- BOTTA Méditerranée
- Botte Fondations
- Bourdarios
- Bourgeois
- BPC s.a./n.v.
- BPI Polska
- BPI s.a./n.v.

- Brantegem n.v.
- Bud-Inz. Sp. z o.o.
- B.U.T. Menard Geosystems Indonesia

COCA Sud-Est

Cofex Littoral

Cofex Régions

Correa Louge

Croizet-Pourty

De Vries & van de Wiel

DEC Asia Pacific Singapore

DEC Nigeria (Silt & Soils)

CSM Bessac

CSOD s.r.o

CTOW n v

CTPR

CTS

DEC France

DEC Middle East

DFC Italy

DEC Spain

DEC Sweden

DEC UK Ltd.

Degaine

Delair-CFD

DEMEsa/nv

Desgrippes

Dodin IDF

DPR COSEA

(PTE) Ltd

Venezuela

l td

Druart s a

Dumez EPS

Dumez Anstett

Dumez Côte d'Azur

Dumez Lagorsse

Dumez Maroc

Dumez Île-de-France

Dumez Méditerranée

Dumez Méditerranée Management

Ducloux

Dodin Réunion

Dredeco PTY Ltd

Dredging International

Dredging International Asia Pasific

Dredging International India PVT Ltd

Dredging International Services Nigeria

Dredging International n.v. Sucursal

Dredging International Spain

Dredging International UK Ltd

DGI Menard Inc Diap Shangai Office

Dodin Guadeloupe

DEC/Ecoterres

Dehe Construction

DEME Blue Energy n.v.

DELATTRE BEZONS Nigeria

Deme Buiding Materials b.v.

Deme Buiding Materials Ltd

Deme Buiding Materials n.v.

Deschiron Océan Indien

Dodin Campenon Bernard

Cofframat

COFOR

Cogit

Comte Conren Ltd

Cotres

COS

Covareal

Cofex Île-de-France

Construction Management Tunisie

Corrosion Control Services Ltd

Dumez Monaco

Dumez Picardie

Dumez Sud

Dumez Var

Dura Zambie

Dvnacoord

EBM

EITP EMCC

EMEX

Enbatra

Edif Real

Ecoterres France

EGC Canalisation

ENGEMA Lignes

ENGEMA s.a./n.v.

ENTREPOSE Asia

ENTREPOSE Libya

Envinet Slovensko

Europ'Agrégats S.A.S.

Europile Pålteknik AB

Extract-Ecoterres

Fabre Construction

Far East Dredging Ltd

Fargeot Lamellé Collé

Freyssinet - Terra Armada S.A.

Frevssinet - Tierra Armada CA

Freyssinet - Tierra Armada S.A.

Freyssinet - Tierra Armada

Freyssinet Arabian Sea LLC

Freyssinet Adria SI d.o.o.

Freyssinet Belgium N.V. Freyssinet Canada Ltee

Freyssinet de Mexico

Freyssinet Hong Kong Ltd

Freyssinet International & Cie

Freyssinet Gulf LLC

de Colombia S.A.

Freyssinet Australia

Freyssinet Balkans

Freyssinet CS

Freyssinet Inc.

Fontec SA

Fratom

Frevrom

Freysas

Fougasse TP

Expertises et travaux Maintenance

Envinet a s

Fric

Essor

ETCR

ETEC s.a.

EUCOS

ENTREPOSE Projets

ENTREPOSE Services

Entreprise René Castells

ENGEMA Rail

ENGEMA Montage

ENTREPOSE Algérie

ENTREPOSE Contracting

Dumez Rhône-Alpes

Dumez-GTM Calédonie

Dura Piling Botswana (PTY) Ltd Dura Soletanche Bachy

Dura Soletanche Bachy Mozambique

BVT DYNIV GmbH



- C.A.P.
- C3B
- CA 2B Dominguez Caillaud Lamellé Collé
- Camozzi Bâtiment Campenon Bernard Bâtiment
- Rhône-Alpes
- Campenon Bernard Construction
- Campenon Bernard Côte d'Azur
- Campenon Bernard Dodin Ingénierie Campenon Bernard Environnement
- Campenon Bernard Franche-Comté
- Campenon Bernard Industrie
- Campenon Bernard Management
- Campenon Bernard Méditerrannée
- Campenon Bernard Provence
- Campenon Bernard Régions
- Campenon Bernard Sud-Est Campenon Bernard TP Côte d'Azur
- . Campenon Bernard Var
- Candet Engeneering Construction
- Cardaillac
- Catalane Construction BTP
- CBCI
- CBR Bâtiment
- CBR TP
- Central Parc

CFE Brabant

CFE EcoTech

CFE Hungary

CFE Qatar wll

CFE Romania

CFE Slovakia s.r.o.

CFE s.a./n.v.

CFE Tchad

CFE Tunisie

Ch. Houillon

Chabanel

Chaillan TP

CHALLENGER Special Oil Services

Chantiers Modernes Construction

Chantiers Modernes Rhône-Alpes

Cimentaciones Mexicanas S.A. DE C.V.

Chantiers Modernes Sud-Ouest

Chantiers Modernes BTP

Chantiers Modernes Sud

Chanzy Pardoux

(CIMESA)

Claisse Bâtiment

CMA Entreprises

CMP Dunkerque

COCA Île-de-France

Claisse

CLE sa

CMPEA

CMS

CLI

CIE

Charles Queyras TP

CFE International

CFE Nederland b.v.

CFE Polska Sp. z o.o.

CFE Immo

- CETRA
- CFE Algérie

PT Inti Fajar Pratama Menard

Purazur n.v.

Ratto EGV

Reichart

Ticaret A S

Remacom n.v.

Rent-A-Port n.v.

Roanne Bâtiment

Rodio Kronsa SA

Roger Bullivant

Romda I I C.

S2R SADC

Saincry

Samas

SAT

SRIF

SBIPB

SBMI

SCB

SGTM

Sicra

SIMP

SBTPC

SBM TP

Salvarem

Sangjee Menard Co. Ltd

SATOB Construction Bois

Scaldis Salvage & Marine

Serra Travaux Maritimes

Contractors n.v.

Sicra Île-de-France

Sigmatec Ingenierie

Simplex Foundations Ltd

SGE-C Congo

Sif Groutbor

SATP - Société Annemassienne de TP

Sateg Construction

Retained Earth

Refco Holdings Inc.

Reinforced Earth Ltd

Reinforced Earth (Pty) Ltd

Reinforced Earth Company Ltd

Reinforced Earth Company Ltd

Reinforced Earth India Pvt. Ltd

Reinforced Earth Insaat Proje Ve

Reinforced Earth Pacific Ltd

Reinforced Earth (SEA) Pte Ltd

Rodio Swissboring Costa Rica S.A.

Rodio Swissboring El Salvador S.A.

Rodio Swissboring Honduras S.A.

Rodio Swissboring Nicaragua S.A.

Rodio Swissboring Panama S.A.

Reinforced Earth Ptv Ltd

Reinforced Earth Pvt. Ltd

Renovenerg
 Rent-A-Port Energy n.v.

Reinforced Earth Malaysia SDN BHD

PT Soletanche Bachy Indonesia

- Freyssinet International Manila Inc.
- Freyssinet Jordan LLC
- Freyssinet Korea Co. Ltd
- Freyssinet Kuwait
- Freyssinet Ltd
- Freyssinet Macau
- Freyssinet Menard India Pvt Ltd Freyssinet Menard Northern
- Emirates LCC
- Freyssinet Menard Qatar WLL Freyssinet Menard Saudi Arabia Ltd
- Freyssinet Mndeni (Pty) Ltd Freyssinet Middle East LLC
- Freyssinet Nederland B.V.
- Freyssinet New Zealand Ltd Freyssinet Ogranak Beograd
- Freyssinet 000
- Freyssinet Polska Sp. z.o.o. Freyssinet Posten (Pty) Ltd
- Freyssinet Products Company (FPC)
- Freyssinet PSC (M) Sdn Bhd
- Freyssinet S.A.
- Freyssinet SNC
- Freyssinet Suisse
- Freyssinet Thailand
- Freyssinet Tierra Armada Chile S.A.
- Freyssinet Tierra Armada de Panama S.A.
- Freyssinet Tierra Armada Perú S.A.C.
- Frevssinet Vietnam

- GAL
- Garçon Gauthier
- Gauchoux
- GEKA Bouw b.v.
- GEOCEAN
- Geofundaciones S.A.S
- Geometric COFOR Ltd
- Geopac
- GeoSea
- GEOSTOCK
- GEOSTOCK Asia
- GEOSTOCK Iberia GEOSTOCK North America
- GETELEC Rés'eau
- GETELEC TP
- GFWA
- Giletto
- Girard
- Girebat
- GIS
- Global Procurement Solutions (GPS)
- GRC Kallo n.v.
- Groep Terryn
- GTM Alsace
- GTM Annecy Pays de Savoie
- GTM Azur
- GTM Bâtiment
- GTM Bâtiment Aquitaine
- GTM Bâtiment Atlantique
- GTM Bâtiment et génie civil
- GTM Bretagne
- GTM Environnement
- GTM Génie Civil et Services
- GTM Guadeloupe
- GTM Lorraine
- GTM Normandie Centre
- GTM Quest
- GTM Sud
- GTM Sud-Ouest Bâtiment
- GTM Sud-Ouest TP GC

- GTM TP Côte D'Azur
- GTM TP IDF
- GTM TP Lyon
- GTM Travaux Spéciaux

MCB

MCCF

MCO

MCO Services

Méditerranée Préfabrication

Menard Geosystems Sdn Bhd

Méridienne de Construction et

Menard Geosystems Singapore Pte Ltd

Middle East Dredging Company (Q.S.C)

Midi Atlantique Fondations (MAF)

Muller Travaux Hydrauliques Alsace

Nassbagger- und Tiefbau GmbH

Nicholson Construction Company

Nordsee Nassbagger - und Tiefbau

Menard Bachy Pty Ltd

Menard Middle Fast

Menard Vietnam

Menard Polska Sp. z o.o.

Mécatiss

Menard

Mentor

Merle

MTC

Bâtiment

Metalithe

Millennium

Navarra TS

Nofrayane

GmhH

Noveliae

Nuvia Canada

Nuvia Ltd

Ocidim

PAC

Petit

Pichenot

Pitance

Prumstav

POA

Odotechniki

Osnova-Solsif

OY Jaennebetoni

Palm Equipment Inc.

Pateu et Robert

Pico Envirotel Inc

PowerAtSea n.v.

PSC Freyssinet (S) Pte Ltd

PT GEOCEAN Indonesia

PT Freyssinet Total Technology

Pannon Freyssinet Ltd

Nuvia India Pvt Ltd

Nuvia Nordic AB

Nuvia Travaux Spéciaux

NYMPHEA Environnement

OAM-DEME Mineralien GmbH

NumRS

Nuvia

NEVEU Génie Civil

Nizet Entreprise s.a.

Nicholson Construction

NEO



Halle

- Halle Pays Dolois
- Hardscapes Supply & Consulting LLC
- Have
- HRM
- Hebetec Engineering A.G.
- Heulin
- Horizontal Drilling International
- Hydro Soil Services n.v.
- Hydroplus
- Hydroplus Australia Pty Ltd
- Hydroplus Inc.
- Immodieze International Seaport Dregding PVT Ltd
- IPEM International Port Engineering
- Management n.v. IPRS
- ISC
- ISIS
- IUR

Janin Atlas Inc.

- Jean Lefebre Pacifique
- Jetgrunn 2000 A/S
- John Jones Excavation
- Jural Métal

La Parisienne du Bâtiment et des

- Travaux Publics
- Lainé Delau Lamy Lang TP

LCRI

LRC

LSE

Maijoie

Marenco

Mastran

MBG

Martuchou

Lantermoz

Les Travaux du Midi

Louis Stevens & Co nv

Maintenance et Travaux Spéciaux (MTS)

Manei - Sogea Atlantique

March Construction Ltd

MAT Fonctionnelle Ecart

Mc Donnell Piling & Foundations

78 MAIN VINCI CONSTRUCTION COMPANIES

- Sisteo Atlantique
- Slaton Bros. Inc.
- SI CP
- SM Entreprise SMELT
- SMP CZ a.s.
- SMS (Stavby Mostov Slovakia a.s.)
- SMTM
- SMTPC
- SNATP Sud-Ouest
- SNFC
- SNV Maritime
- Sobea Auvergne
- Sobea Environnement
- Sobeam
- Soblis
- Socavim
- Società Italiana Dragaggi Spa Société Calédonienne de Bâtiment
- Société de Dragage International SDI s.a.
- Société Immobilière des 20 arpents
- Socogim
- Socra
- Sodim Caraïbes
- Sofipa
- Sogam
- Sogea Atlantique
- Sogea Atlantique BTP
- Sogea Atlantique Hydraulique
- Sogea Bretagne BTP
- Sogea Caroni
- Sogea Centre
- Sogea Est BTP
- Sogea Guyane
- Sogea Île-de-France Génie Civil
- Sogea Île-de-France Hydraulique
- Sogea Manutention
- Sogea Maroc
- Sogea Martinique
- Sogea Mayotte
- Sogea Midi-Pyrénées Hydraulique
- Sogea Nayel
- Sogea Networks
- Sogea Nord Hydraulique Sogea Nord-Ouest
- Sogea Nord-Ouest TP
- Sogea Picardie
- Sogea Réunion
- Sogea Rhône-Alpes
- Sogea-Satom
- Sogea-Satom Afrique du Sud
- Sogea-Satom Algérie
- Sogea-Satom Bénin
- Sogea-Satom Burkina Faso
- Sogea-Satom Burundi
- Sogea-Satom Cameroun
- Sogea-Satom Côte d'Ivoire
- Sogea-Satom Gabon
- Sogea-Satom Guinée
- Sogea-Satom Guinée équatoriale
- Sogea-Satom Kenya
- Sogea-Satom Madagascar
- Sogea-Satom Mali
- Sogea-Satom Mozambique
- Sogea-Satom Niger
- Sogea-Satom Ouganda
- Sogea-Satom République centrafricaine
- Sogea-Satom République
- démocratique du Congo
- Sogea-Satom Rwanda Sogea-Satom São Tomé
- Sogea-Satom Sénégal
- Sogea-Satom Tanzanie
- Sogea-Satom Tchad

- Sogea-Satom Togo
- Sogea Sud
- Sogea Sud-Est TP
- Sogea Sud-Ouest Hydraulique

SPI M

SPPC

SRC

SRCA

SRTP

STEL SAS

Sud Travaux

Tabard Construction

Technology Centre

Terra Armada Ltda

Terra Armata S.r.l.

Terramundo I td

Terre Armée B.V.

Terre Armée K.K.

Terre Armée SAS

Tierra Ármada S.A.

THR

Tideway

TMSO

TPC

TPR TRA-SABLE

Tradilor

Trajeo'H

TSM

UGS

Urban

Verazzi

Verdoïa

Vibro Menard

Urban BTP

U.S. Wick Drain

Van De Maele Multi-Techniek

Vanderhoydoncks n.v.

Verdino Construction

Vibro Foundations Ltd

Vibro Foundations Ltd Dubai

Tournaud

Terre Armée Belgium N.V.

Terre Armée Internationale

Terre Armée Romania S.R.L.

The Vibroflotation Group

Tierra Armada de Mexico

TMSO Midi-Pyrénées

Travaux Du Midi Var

Travaux lean Rohou

Triverio Construction

Túneles y Colectores S.A.

The Reinforced Earth Company

TPHR (Travaux Publics Haut-Rhin)

TCI

TEC system

Structures Engineering

Structures Geotechnics

Structures Europe-Afrique

Structures Vietnam - Hanoï

Structures Vietnam - Ho Chi Minh City

Swissboring Overseas Corporation Ltd

Taylor Woodrow Civil Engineering

Taylor Woodrow International

Structures Île-de-France

Vibro Services GmbH

Management Ca

Management Lr

VINCI Construction Dom-Tom

VINCI Construction France

VINCI Construction France

VINCI Construction France

VINCI Construction France

Management Provence

VINCI Construction France

VINCI Construction France

VINCI Construction France TP

VINCI Construction Hellas

VINCI Construction SI

VINCI Construction UK

VINCI Environment UK

Warbud Beton Sp. z o.o.

Z MAKINA Teknolojisi AS

Zetas AGT MMC Ltd

Zetas ATS Foundation

Zetas AS Branch

Zemin Etüd ve Tasarım A.S

Zemin International Kazakhstan Branch

Zemin Teknolojisi Uluslararası AS

Zetas Arabia Foundation Technology

Warbud VINCI Facilities Sp. z o.o.

VINCLEnvironnement

VINCI Facilities

VIPP Travaux

VMA Slovakia

Voltis s.a.

Warbud SA

Westpile Limited

Weiler

WMI

Zetas

VMA

Vraco

VINCI Construction France Ouest

VINCI Construction France Sud-Ouest

VINCI Construction Grands Projets

VINCI Construction Technology

VINCI Construction Terrassement

Normandie Centre

Sud Management

Île-de-France

- Sogea Sud-Ouest TP
- Sogea TPI
- Sogeforh
- Sogès
- Sogesmaint CBRE
- Sogesmaint CBRE Luxembourg
- Soil Engineering
 Soil Engineering Geoservices Ltd
- Sol Environment
- Sol-Expert international Soldata Acoustic
- Soldata Asia
- Soldata Geophysic
- Soldata Grontmij V.O.F. Soldata Iberia Portugal
- Soldata Iberia S.A.
- Soldata Inc. Soldata Limited
- Soldata Abu Dhabi

Soletanche Bachy C.A.

Soletanche Bachy China

Soletanche Bachy Chile S.A.

Soletanche Bachy Cimas S.A.

Soletanche Bachy Ecuador

Soletanche Bachy Fundatii

Soletanche Bachy Égypte

Soletanche Bachy India

Soletanche Bachy Qatar

Soletanche Bachy Tunnels

Soletanche Bachy SA

Soletanche Do Brazil

Soletanche Inc.

Soletanche Sam

Soletanche Stroy

Solhydro spol sro

Solomat

Solsif Maroc

SOLUMAT

Somi

Sonil

Soretub

Sotem

Sotram

Sotramines

SPIECAPAG

Sovame

Speic

Soletanche Freyssinet

Soletanche Inc. Puerto Rico

Soletanche Luxemburg S.A.

Soletanche Polska SP Z.o.o.

Solstice Grand Angoulême

Sondagens Rodio LDA

Sotram Construction

Southern Pipeline Contractors

SPIECAPAG Régions Sud

SPIECAPAG Réunion

SPIECAPAG UK Ltd

Soletanche Bachy LLC

Soletanche Bachy Dubai Branch

Soletanche Bachy Netherlands BV

Soletanche Bachy New Zealand

Soletanche Bachy Pieux (et E2F)

Soletanche Bachy Uruguay S.A.

Soletanche Ceska Republika S.R.O.

Soletanche Spezialtiefbau Ges.m.b.H.

Soletanche Bachy Australia PTY Ltd

- Soldata Pannonia
- Soldata S.A.S.
- Soldata Ukraine
- Soletanche Bachy Soletanche Bachy Argentina sa



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